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(Brown University)

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GENERAL

(incl. Statistics)

299. [Anon.] [Politico-social objectives of German psychology.] *Wirtschafts- u. Sozialber.*, 1942.—[Abstracted review; original not seen.] Accepted as essential to the organization of modern social life, psychology can contribute principally to the co-ordinating of the human resources of the state. The basic psychological procedure is the evaluation of equivalent occupational constellations in relation to appraisal of the individual in his range of capacities, aptitudes, etc.—H. D. Spoerl (American International College).

300. Bernhardt, K. S. Proceedings of the annual meeting of the Canadian Psychological Association. *Bull. Canad. psychol. Ass.*, 1944, 4, 33-34.—At the 1944 meeting of the Canadian Psychological Association, sessions were held on psychology and education, psychology and industry, and the rehabilitation of military personnel. Seven research papers were also presented. Report of the business meeting is given, including a resolution concerning the extension of vocational counseling in Ontario and the training in psychological techniques of the counselors.—F. W. Finger (Virginia).

301. Cassirer, E. The concept of group and the theory of perception. *Phil. phenomenol. Res.*, 1944, 5, 1-35.—This is a translation of an article in the *Journal de psychologie normale et pathologique*, 1938, 35, 368-415 (see 14: 15). Spanish summary.—F. Heider (Smith).

302. Dadourian, H. M. The principle of the unobservable. *Sci. Mon.*, N. Y., 1944, 59, 293-295.—Einstein was probably the first physicist to recognize the value of the principle "that which is unobservable is not significant," and to use it consciously. Dingle has made a real contribution in a critical analysis of this concept but has erred, in his criticisms, by drawing unsound conclusions from his analysis.—E. Girden (Brooklyn).

303. Greig, J., & Ritchie, A. A simple apparatus for remote nerve stimulation in the unanaesthetized animal. *J. Physiol.*, 1944, 103, Suppl., 8P.—The electrical stimulation of nerves normally inaccessible in the conscious animal may be effected by the use of induced electric currents excited from an external source. An instrument based on this principle is described and illustrated.—M. E. Morse (Baltimore, Md.).

304. Gundlach, R. H. Proceedings of the twenty-fourth annual meetings of the Western Psychological Association. *Psychol. Bull.*, 1944, 41, 586-592.—The programs of the local meetings of the Bay Area and the Los Angeles Area are presented—S. Ross (U. S. Naval Reserve).

305. Hellpach, W. Psychologie und Animistik. (Psychology and animism.) *Forsch. Fortsch.*, 1944, 20, 103-105.

306. Holzinger, K. J. The relationship between the centroid and Spearman's methods. *J. educ. Psychol.*, 1944, 35, 347-351.—The author demonstrates the equivalence of the centroid method, Spearman's 1914 method, and Spearman's correlation of sums in the case that the Spearman formulas are extended to include the communalities in the diagonal of the correlation matrix.—E. B. Mallory (Wellesley).

307. Johnson, H. G. An empirical study of the influence of errors of measurement upon correlation. *Amer. J. Psychol.*, 1944, 57, 521-536.—Of the two effects which errors of measurement have on correlations, the lowering of the obtained below the true r has been emphasized, while the fluctuations they induce in the r have been largely ignored. The present paper furnishes empirical proof that random errors may at times raise the obtained r above its true value. A reading and an arithmetic test were given to 55 eighth-grade children; the r between the scores was .588, and this was considered the true r . Chance errors were assigned 6 times to each of these scores, and 15 reliability coefficients for each test and 36 intertest correlations were computed. The former range from .862 to .897 for reading, and from .889 to .925 for arithmetic. The latter range from .451 to .637. It is pointed out that errors of measurement do not necessarily reduce an observed coefficient below its true value. Correlations corrected for attenuation are sometimes above +1.00 as a result of fluctuations in observed r 's due to errors of measurement, rather than errors of sampling (Spearman's assumption). The theoretical significance of the results is considered.—D. E. Johannsen (Skidmore).

308. Leeper, R. Dr. Hull's *Principles of Behavior*. *J. genet. Psychol.*, 1944, 65, 3-52.—Hull's book will have wide appeal because of (1) widespread interest in problems of learning, (2) its peripheralist approach dominated by the directions implicit in the theories of Pavlov and Thorndike, and (3) the apparent simplicity of its approach toward a theory of learning. However, as one checks "its empirical material against the experimental literature, one flaw after another appears, and one is driven finally to the conclusion that most of the major conclusions of the book, experimentally speaking, are either meaningless or demonstrably unsound." It is pointed out that the data of several experiments are probably unjustifiably stretched by Hull to fit his hypotheses and that Hull has neglected to cite or mention the findings of many important experimenters in the field of learning. It is concluded that "as a synthesis of experimental material now available, the peripheralist approach has outlived its usefulness."—R. B. Ammons (Iowa).

309. Moehlman, A. B. Edward Lee Thorndike, master teacher. *Nation's Schs.*, 1944, 34, No. 4, 19.—This is an appreciation of the man, with a brief review of his major contributions to psychology and education.—G. S. Speer (Central YMCA College).

310. Mueller, G. E. What is man? *Phil. Rev.*, N. Y., 1944, 53, 444-464.—C. C. Cooper (Maryland).

311. Sachs, H. Freud, master and friend. Cambridge, Mass.: Harvard University Press, 1944. Pp. 195. \$2.50.—Sachs gives a subjective, personal account of contacts and associations with Freud from 1904 until 1939. The book portrays the background and environment in which Freud lived and worked, his personality and his intimate views and attitudes, his relationships with the author and with other members of the original psychoanalytical group, giving illustrative incidents and conversational interchanges which reflect the impact of Freud's personality upon those associated with him both professionally and intimately.—M. H. Erickson (Eloise Hospital).

312. Scow, R. O., & Robins, M. E. Apparatus for the study of delayed reaction in children. *J. genet. Psychol.*, 1944, 65, 177-179.—"The apparatus herein described has been designed for the study of memory in young children. It presents a form of multiple choice situation consisting of 12 identical small boxes arranged in two banks of six boxes each. The apparatus features a locking device which, upon the closing of the operator's switch, serves to fasten the lids of all closed boxes as soon as the lid of one of the boxes has been lifted."—R. B. Ammons (Iowa).

313. Travis, R. C. A new stabilometer for measuring dynamic equilibrium in the standing position. *J. exp. Psychol.*, 1944, 34, 418-424.—This device consists of a platform mounted on a universal joint with spring supports under each corner of the platform; a hinged stylus which makes contact as it moves over a target; an electric interval timer; and an electric counter. The subject attempts to stand on the platform for one minute, with feet together and hands at his side while he focuses on the target. Since weight and height were found to be variables, a table is included showing mean scores and standard deviations for different height and weight groups of 164 college men and 157 college women. The reliability of the stabilometer, ascertained by correlating successive trials, showed the following correlations when visual cues were operating: trial one with trial two, .86; trial two with trial three, .85; and trial one with trial three, .80. During an extended series of trials, a small amount of learning was observed. It was found "that individuals reporting fatigue, recent imbibing of alcohol, loss of sleep, or recent violent exercise tend markedly towards inadequacy in performance of this type, whereas those reporting previous training in dancing, skiing, gymnastics and skating tend towards a performance far above normal."—N. H. Pronko (Indiana).

314. Visser, S. S. Recently starred psychologists. *Amer. J. Psychol.*, 1944, 57, 573-574.—An analysis is given of the present academic location, institution from which collegiate and doctoral degrees were obtained, and birth places of the 13 psychologists who

were starred in the 1943 edition of *American Men of Science*.—D. E. Johannsen (Skidmore).

[See also abstracts 461, 470, 491.]

NERVOUS SYSTEM

315. Freeman, W., & Watts, J. W. Behavior and the frontal lobes. *Trans. N. Y. Acad. Sci.*, 1944, 6, 284-310.—The techniques and typical postoperative course in prefrontal lobotomy are described. Intelligence, in the narrow sense, is seldom reduced significantly; planning and adaptability are, however, characteristically disturbed. Empathy and discretion in interpersonal relations are also impaired. These data indicate that to the behavior of the intact organism the frontal lobes add foresight and insight: they furnish to the individual "a certain awareness of himself more or less heavily charged with emotional feeling tone, and . . . this awareness enables him to meet and converse with his fellows with a sufficient display of dignity, reserve, interest, patience, altruism, sympathy and helpfulness." How this capacity for imagination and self-criticism may become perverted, culminating in the psychotic response, is understandable in terms of the exaggerated perseveration and fixation of these once-normal functions. Thus, the frontal lobes are the basis, not only for superior human adaptation, but also for the functional psychoses.—F. W. Finger (Virginia).

316. Goldberg, H. Two methods for obtaining the propagation and distribution characteristics of the action potential in muscle and nerve. *Summ. doct. Diss. Univ. Wis.*, 1942, 6, 63.

317. Humphrey, T. Primitive neurons in the embryonic human central nervous system. *J. comp. Neurol.*, 1944, 81, 1-45.—Two kinds of primitive neurons are found in the embryonic human central nervous system. The earliest are present in embryos of 5 mm. (approximately 33 days) and appear prior to the first observed movement. They resemble the primitive Rohon-Beard cells found in amphibians by Coghill. The second type consists of intramedullary bipolar cells which appear later than the first but while these are still present. They are to be seen in their most characteristic form in embryos of 22.5 mm. (approximately 8 weeks). At this time the embryos are active. Morphologically the primitive neurons are adapted to a generalized type of activity rather than to specific, localized reactions. Their time of appearance suggests that they may carry impulses before either the spinal ganglion cells or the permanent motor neurons become effective.—C. P. Stone (Stanford).

318. Le Gros Clark, W. E. The problem of neuronal regeneration in the central nervous system. I. The influence of spinal ganglia and nerve fragments grafted in the brain. *J. Anat., Lond.*, 1942, 77, 20-48.—Implantation of predegenerated fragments of rabbit sciatic nerve into the cortex was accompanied by the appearance of a few regenerating axones, the origin of which is debated. They could not be definitely traced to intrinsic cerebral fibers. Nevertheless they prove that the cerebral environment does not of itself hinder regeneration. This is somehow facilitated by the grafted tissue,

since regenerating fibers are not seen following other experimental lesions. These experiments suggest that the facilitating agent is found in the Schwann elements. The few surviving nerve cells of the implanted ganglia showed great regenerative activity. Their fibers penetrated into the cellular infiltrate surrounding the graft, but they exerted no influence on the host brain. No cortical fibers extended toward the graft. Traumatized and dislocated cortical fibers in proximity to the graft must be distinguished from regenerating fibers.—*M. E. Morse* (Baltimore, Md.).

319. Liberson, W. T. **Abnormal brain waves and intellectual impairment.** *Inst. of Living*, 1944, No. 12, 234-248.—Intellectual impairment as measured by the Shipley-Hartford test was more frequent in groups of individuals showing severely abnormal brain waves, fast or slow, than in individuals with normal, borderline, or moderately abnormal EEG's. This trend is maintained despite correction for age factors in the intellectual impairment index. The data are only suggestive of possible relationships between EEG and type of abnormality. The highest percentage of severely abnormal EEG's appears in organic disorders (arteriosclerotic, senile and toxic). Sample tracings are presented in an appendix.—*S. B. Williams* (U. S. Naval Reserve).

320. Lubin, A. J. **Neurology and psychiatry: recent contributions to neurology from war experiences.** *Amer. J. med. Sci.*, 1944, 207, 114-129.—Recent literature in the field of war neurology is reviewed under the following topical headings: (1) head injuries; (2) peripheral nerve injuries; (3) meningococcal meningitis; and (4) the use of electroencephalography in the armed forces. Bibliography of 73 titles.—*M. M. Simpson* (Wisconsin).

321. Nichterlein, O. E., & Goldby, F. **An experimental study of optic connexions in the sheep.** *J. Anat., Lond.*, 1943, 78, 59-67.—Degenerations following enucleation of one eye show that about 90% of the optic fibers cross in the chiasma. The crossed fibers are connected with laminae 1 and 3 of the dorsal nucleus of the lateral geniculate body, the uncrossed with lamina 2. Many crossed fibers, but no uncrossed ones, reach the stratum opticum of the superior colliculus. No evidence was found for the presence of any other primary optic connections, with the possible exceptions of the pars geniculata pulvinaris and the nucleus tracti optici.—*M. E. Morse* (Baltimore, Md.).

[See also abstracts 303, 335, 366, 367, 411.]

RECEPTIVE AND PERCEPTUAL PROCESSES

322. Crider, B. **A battery of tests for the dominant eye.** *J. gen. Psychol.*, 1944, 31, 179-190.—Standardized procedures for 7 measures of dominance requiring an optimum of 13 sightings are described for: (1) the ring test (held successively in each hand); (2) the card test (with central hole for peeping at pencil spot); (3) the box test (black and white strings at both ends to be aligned); (4) the cone test (subject looks at examiner's nose through a tube); (5) the ophthalmoscope (subject finds his own mirrored eye at end of the tube); (6) the spot test (subject finds his nose in a mirror with reflecting surface reduced to

size of a silver quarter); and (7) the mirror test (subject brings his nose within a nickel-sized ring outlined on a scratched mirror). A muscle test using a fixation disk for determination of convergence at points close to the eye is also employed; the diverging or nonfixating eye is the nondominant one. This last is used solely as a verification of the sighting results. A complete analytical record sheet is included. This technique shows about 54% right-eyed, 25% left-eyed (stable behavior), and approximately 7% each in the right-eyed tendency, left-eyed tendency, and impartial tendency categories. The troublesome problem of secondary images in the nondominant eye has been reduced to a minimum; both eyes are always kept open. The function is not connected with sex, intelligence, or visual acuity.—*G. W. Hartmann* (State College, Pa.).

323. Dethier, V. G. **The dioptric apparatus of lateral ocelli. II. Visual capacities of the ocellus.** *J. cell. comp. Physiol.*, 1943, 22, 115-126.—"Vision in insects possessing simple eyes is the sum total of the capacities of all units [ocelli] operating jointly. The twelve ocelli of lepidopterous larvae project twelve points of light on receptive surfaces forming an exceedingly coarse mosaic of intensities. By klinotactic-like movements the larvae, while advancing, are able to examine a larger field of vision than would be otherwise possible with so few photic units. This makes possible a primitive type of form-perception."—*F. A. Beach* (American Museum of Natural History).

324. Evans, R. M., & Klute, J. **Brightness constancy in photographic reproductions.** *J. opt. Soc. Amer.*, 1944, 34, 533-540.—A photographic reproduction is objectively correct when the relative luminances of the print become identical with those of the original. Under these conditions, however, brightness constancy effects are so greatly reduced in the print that the result is unsatisfactory from the point of view of the observer. It is shown experimentally that in a simple portrait situation it is possible to secure satisfactory reproductions by the use of appropriate lighting techniques. The lighting contrast must in general be much less in viewing the scene than is desired in the final print.—*L. A. Riggs* (Brown).

325. Foley, J. P., Jr. **Sensori-motor adaptation following orthodontic opening of the bite.** *J. gen. Psychol.*, 1944, 31, 297-298.—Orthodontic techniques (inlays) for the correction of various types of malocclusion cause a readaptation of chewing movements significant for the psychology of kinesthetic space perception. The picture is similar to that found in prolonged distortion of the visual or auditory fields.—*G. W. Hartmann* (State College, Pa.).

326. Göthlin, G. F. **Interaction of excitatory and inhibitory processes in the synthesis of the sensations of colour and of white.** *Uppsala Läk. Foren. Förh.*, 1944, 49, 433-446.—Negative values for coefficients of standard colors appearing in trichromatic mixture data suggest that there may be inhibitory impulses accompanying the excitatory ones which proceed from the visual sense cells. The cessation of such inhibition might lead to a condition of hyperexcitability coincident with the

appearance of a negative afterimage. Red and green are assumed to balance one another and, when mixed together, to be capable of arousing a sensation of yellow. This combination is in turn balanced against blue, the addition of which may be used to arouse a sensation of white.—*L. A. Riggs (Brown)*.

327. Hartridge, H. **Appreciation of the colour of small objects.** *J. Physiol.*, 1944, 103, Suppl., 4P.—In addition to the difficulty of comparing the color or intensity of one small object with another, the colors of small objects are considerably modified so that the observed color differs materially from the true color. The conditions under which this occurs are: (1) errors due to chromatic aberration of the eye, e.g., small objects at different distances from the observer acquire colors which are caused by chromatic aberration; and (2) errors produced by the use of common optical instruments. In most of these instruments the correction of chromatic aberration leaves the secondary spectrum uncorrected, in consequence of which objects slightly out of focus are given a spurious color. Objects which refract light acquire a color which is due to the secondary spectrum of the objective.—*M. E. Morse (Baltimore, Md.)*.

328. Hartridge, H. **The form of the retinal image.** *J. Physiol.*, 1944, 103, Suppl., 5P.—Hartridge summarizes the facts for and against the view that the eye suffers from chromatic aberration. The explanation of these apparent contradictions is that two phenomena come into play to reduce the amount of color error present. One, correction of chromatic aberration by diffraction, operates at small apertures. The rays which form the smallest aberration discs on the retina are those which undergo the greatest diffraction and, vice versa, the result is that the one tends to neutralize the other. Neutralization, however, is not complete. The second phenomenon, the retinal direction effect, operates at large apertures, i.e., pupil diameters greater than 5 mm. Apparently an additional factor, as yet unknown, exists which operates particularly at medium apertures.—*M. E. Morse (Baltimore, Md.)*.

329. Lange, C. W. **Sight development.** *Optom. Wkly.*, 1944, 35, 963-965; 978.—Reports of several cases of suppression of vision which responded to visual training are presented.—*D. J. Shaad (Durham, N. C.)*.

330. Livingston, P. C. **Visual problems of aerial warfare. I. "Night": studies in the dark-adapted eye.** *Lancet*, 1944, 247, 33-38.—Studies of adaptation to night flying developing since World War I led to two schools of thought. One regarded night vision as a purely physiological problem. In the other view, held by the ophthalmic department of the RAF, the faculty of interpretation is emphasized. In consequence a new apparatus, the rotating hexagon, was developed, a testing device exposing various figures which have to be identified and put down on paper. Evidence accumulating over some time has shown a significant relationship between scores and actual performance in night flying. The design of the hexagon is based on the assumption that a mixed retinal activity is characteristic for flying operations by night. It was found that smallness of the central scotoma is closely related to high scores with the hexagon. Verifying earlier studies of Østerberg, at

about 5-6 mm. from the fovea, a very pronounced ring-shaped zone of maximal rod count was found. Experiments in a low pressure chamber show that rod sensitivity diminishes rapidly in the process of anoxemia. This is felt intensely at an altitude of 18,000 ft. and above. In the presence of such changes, differences in impulse conduction can be accounted for by synaptic delay and by the part played by visual purple in adaptation.—*F. Wyatt (McLean Hospital)*.

331. Mann, M. E., & Domeier, L. H. **The effect of various intensities of light on certain laboratory animals.** *J. Lab. clin. Med.*, 1943, 28, 1696-1714.—The authors undertook this study in view of popular beliefs on the effects of visible light on man and differences in experimental results with animals. Rats, rabbits, guinea pigs, and chickens were exposed for 12 hours daily to light from fluorescent tubes producing respectively 3, 100, and 1000 foot-candles. The other 12 hours they remained in total darkness. The health, behavior, and gain in weight were the same in animals exposed to different intensities of light, and autopsies showed no unusual differences in the organs. Intense illumination was not uncomfortable if the temperature was not raised, and no definite injury to the eyes was found on fundoscopic examination. An increased rate of hair growth occurred in animals exposed to the higher intensities.—*M. E. Morse (Baltimore, Md.)*.

332. Nickerson, D., & Stultz, K. F. **Color tolerance specification.** *J. opt. Soc. Amer.*, 1944, 34, 550-570.—Several formulations of small-difference data are evaluated by comparison with visual judgments of a group of observers. 47-item bibliography.—*L. A. Riggs (Brown)*.

333. Schilder, P. **Congenital alexia and its relation to optic perception.** *J. genet. Psychol.*, 1944, 65, 67-88.—The author discusses the case records of six boys and one girl, ranging in age from 8 to 14 years, all presenting symptoms of congenital word blindness. It is concluded that "the basic difficulty in congenital reading disability is the difficulty to differentiate the spoken word into its sounds and to put together the sounds of a word. Words and single sounds are brought into connection with a written word and a written letter, but the written word and the written letter cannot be integrated and differentiated. Two other independent difficulties may be present—mirror mistakes and trouble in the optic perception of letters. There are no troubles in other optic perceptions. We deal with an isolated trouble in a gnostic-intellectual function."—*R. B. Ammons (Iowa)*.

334. Sheard, C. **Dark adaptation: some physical, physiological, clinical, and aeromedical considerations.** *J. opt. Soc. Amer.*, 1944, 34, 464-508.—The available knowledge of the processes of dark adaptation in the human eye is summarized and discussed. The differential contributions of the rods and cones are outlined with regard to spectral sensitivity, threshold, preadaptation, and retinal location. Procedures and results of adaptometric measurements are described. Effects of certain diseases, drugs and vitamin deficiencies, anoxia, and hypoglycemia are presented. There is a 3-page bibliography.—*L. A. Riggs (Brown)*.

335. Shenkin, H. A., & Lewey, F. H. Taste aura preceding convulsions in a lesion of the parietal operculum. *J. nerv. ment. Dis.*, 1944, 100, 352-354. —A clinical study is presented as evidence in support of Bornstein's theory that the cerebral representation for taste is separate from that for smell. The patient began having convulsions preceded by an aura of a sour, bitter taste. Using the Zwaardemaker apparatus, smell sensitivity was found normal in both nostrils. In tests of taste sensitivity, bitter and salt were perceived normally, sour was perceived all over the tongue but was sometimes called bitter, while sweet was recognized on the right side of the tongue only. As predicted by Bornstein, a lesion was found in the parietal operculum.—L. B. Heathers (Smith).

336. Wiltberger, P. B. A test for color blindness. Columbus, Ohio: Long's College Book Co., 1944. Pp. 7. \$1.00.—This test is a short form of the book, *A New Test for the Detection of Color Blindness*, by the same author, published in 1941 (see 15: 2935). Ratings as to red or green color weakness are based upon the latencies and hues of afterimages to three stimulus patches of color.—L. A. Riggs (Brown).

[See also abstracts 301, 321, 352, 376, 408, 485, 528, 566.]

LEARNING, CONDITIONING, INTELLIGENCE

(incl. Attention, Thought)

337. Allen, W. F. A comparison of the dog's ability to respond correctly to conditioned differential tests with auditory, olfactory, general cutaneous, and optic analyzers. *J. gen. Psychol.*, 1944, 31, 37-52.—Six dogs were trained for correct conditioned differentiation, i.e., the ability to respond correctly with foreleg flexion (or absence) to a series of positive and negative conditioned reflex tests given in varied sequences and ratios. With such stimuli as a bell and board tapped once per sec., the ratio of correct to incorrect responses was good after differentiation appeared. Similar results were found for olfactory vapors like cloves and asafetida, though general cutaneous vapors, like chloroform and acetic acid, gave only fair reactions. Brushing with or against the hair grain produced good differentiation. The optic analyzer, however, gave consistently poor results with light-dark, constant vs. flicker illumination, and white circle and cross stimulation; temporary situational tension or neurotic symptoms were common. The order in which the analyzers are listed in the title signifies the comparative effort required to obtain correct conditioned differentiation.—G. W. Hartmann (State College, Pa.).

338. Beebe, H. H. Auditory memory span for meaningless syllables. *J. Speech Disorders*, 1944, 9, 273-276.—Auditory memory span for meaningless syllables was found to increase with chronological age, though not consistently with each change in age level, for English-speaking children. The average span appears to be lower than for the German-speaking children studied by other investigators. No sex difference was found.—F. W. Finger (Virginia).

339. Brownell, W. A. Rate, accuracy, and process in learning. *J. educ. Psychol.*, 1944, 35, 321-337.—The author presents speed and accuracy curves for multiplication by about 115 pupils in each of grades 3A to 5A, inclusive, but points out that these show serial improvement in product, i.e., test results, rather than qualitative changes in the process of learning. The test records were therefore supplemented by carefully planned 15-minute interviews with as many of the children as possible. Processes reported were classified in 11 categories, ranging from guessing to habituation with insight. It was found that the learning of meaningful relationships is not a simple, straight-line affair but involves progressive reorganization from lower to more mature and effective processes or reaction patterns.—E. B. Mallory (Wellesley).

340. Bunch, M. E. Cumulative transfer of training under different temporal conditions. *J. comp. Psychol.*, 1944, 37, 265-272.—Using human subjects, the degree of transfer of training under conditions of massed and distributed learning was investigated. Five problems on a 30-unit punchboard maze were given to one group of 100 college students under conditions of massed practice in which the problems were mastered to a criterion of one perfect trial in one session. A similar group of 50 students learned the problems at time intervals of 24 hours. Transfer was measured by the increase in learning efficiency from problem to problem. Results indicate (1) that the cumulative effects of transfer of training are more pronounced early in the series of 5 problems under massed practice than under conditions of distributed practice and (2) that the total cumulative transfer effects at the end of the series of problems are approximately equal under the two temporal conditions of practice studied.—L. I. O'Kelly (U. S. Army).

341. Clark, M. P. Changes in primary mental abilities with age. *Arch. Psychol.*, N. Y., 1944, No. 291. Pp. 30.—This is a study of changes in mental organization at 3 stages in the growth curve, involving 6 of the Thurstone primary mental abilities (number, verbal meaning, space, word fluency, reasoning, and memory). The descriptive characteristics of the subjects are as follows: (1) total number was 346; (2) age groups used were 11, 13, and 15 years, equated in IQ; (3) Ss came from 6 elementary and 4 high schools in neighborhoods varying in socioeconomic level; (4) grades IV to XII were sampled (plus two 15-year-old college freshmen); (5) median group-test IQ's of the schools ranged from 83 to 115; and (6) nearly all Ss were native born. The major findings were: (1) Statistically significant increases with age in the six components occurred. (2) Consistent age-increases in variability on each component were found. (3) As shown by an analysis of overlap, the amounts of change through these age levels, from greatest to least, were in word fluency; reasoning and verbal meaning; memory, space and number. (4) There was a decrease in intercorrelation of the abilities as age increased (except for memory, which was little related to other factors at any age). (5) The growth curves of all components were more alike than different, although those for word fluency and reasoning tended to level off slightly after 13 years. (6) With the exception of memory,

age changes in primary abilities were not noticeably influenced by general intelligence.—C. E. Buxton (Iowa).

342. Eagleson, O. W., & Lipford, E. J. A study of number choices. *J. gen. Psychol.*, 1944, 31, 129-133.—Seven hundred subjects were required to write the numbers 1 through 10 in column order, and then to choose one for underlining; 350 males and 350 females from 7 to 65 years participated. Centrally located digits (4, 5, 6, 7) were selected about twice as often as others. It is suggested that the factor of location, i.e., esthetic motivation and focal attention, is responsible for this phenomenon rather than factors of belief, association, or pure chance.—G. W. Hartmann (State College, Pa.).

343. Estes, W. K. An experimental study of punishment. *Psychol. Monogr.*, 1944, 57, No. 3. Pp. 40.—Using the Heron and Skinner lever-pressing apparatus for the study of learning in animals, the author performed 12 interrelated experiments on rats to determine the effects of electroshock pain on the lever-pressing response. The individual projects are intended to throw light on several fundamental questions, such as (1) the extent to which punishment merely suppresses the tendency of an habitual response to appear, as opposed to eradicating it from the animal's repertoire of habits, but leaving it with latent strength to reappear later on; (2) the precise mechanism by which painful experience affects learned responses; and (3) the extent to which empirically derived principles which are adequate to describe the effects of punishment on a single motor response are sufficient to describe its effects on more complex habit organizations. Conclusions from the individual experiments and from the 10 empirical principles derived therefrom cannot be briefly epitomized without unwarranted condensation or danger of distortion of findings. 60-item bibliography.—C. P. Stone (Stanford).

344. Furst, B. How to remember; a practical method of improving your memory and powers of concentration. New York: Greenberg, 1944. Pp. 237. \$2.50.

345. Gulliksen, H., & Peterson, D. Demonstration of animal learning to a large class. *J. gen. Psychol.*, 1944, 31, 273-275.—Photoflood reflector bulbs when used to illuminate rats engaged in auditory discrimination requiring a string-pulling apparatus made the general surroundings invisible to the animals, so that they performed just as rapidly in the presence of silent audiences of 400 students in the Biological Sciences Survey course at the University of Chicago as in an empty room.—G. W. Hartmann (State College, Pa.).

346. Huang, I. Experimental studies on the rôle of repetition, organization, and the intention to learn in rote memory. *J. gen. Psychol.*, 1944, 31, 213-217.—Using paired associates (symbols-digits) in a series containing formal resemblances, the author offers results purporting to confirm the view "that mere repetition of a sequence, without 'belongingness' and without the intention to learn on the S's part, leads to no learning, inasmuch as even the most sensitive method of relearning failed to reveal any."—G. W. Hartmann (State College, Pa.).

347. Humphrey, G. The problem of generalization. *Bull. Canad. psychol. Ass.*, 1944, 4, 37-51.—Generalization is "the process by which an organism comes to effect a constant modification towards an invariable feature which occurs under varying conditions." Without this capacity for responding to similarities in an infinitely-varying world, the organism would perish. After a survey of the philosophical background of the problem, a number of pertinent learning experiments are reviewed and related to the central problem; 18 general conclusions are drawn from the discussion.—F. W. Finger (Virginia).

348. Iglesias de Emanuele, M. C. La evolución de las ideas y el problema del método. (The evolution of ideas and the problem of method.) *Rev. Educ. La Plata*, 1944, 85, No. 2, 3-9.—The historical development of the theory of ideas is surveyed in relation to educational procedure. The still prevalent Herbartian approach, with its empiricistic atomism, is not a suitable basis for educational method. Its one-sided emphasis on the cognitive aspect is a special weakness.—H. D. Spoerl (Jeffersonville, Vt.).

349. Ladieu, G. The effect of length of delay interval upon delayed alternation in the albino rat. *J. comp. Psychol.*, 1944, 37, 273-286.—"A group of ten male albino rats were given training in alternation between two paths of an enclosed maze. Delay trials were then instituted and so arranged that, throughout the course of the experiment, practice was equal for all delay intervals from 5 minutes to 120 minutes." As the result of preliminary experiments, suitable controls for extraneous cues were instituted. The animals showed a higher percentage of alternation than chance expectancy. This was true at all delay intervals, and the decrease in alternation with increasing delay was irregular and statistically not significant. Individual differences were noted, some animals being able to show alternations consistently after a 480-minute delay.—L. I. O'Kelly (U. S. Army).

350. Leavitt, H. J., & Schlosberg, H. The retention of verbal and of motor skills. *J. exp. Psychol.*, 1944, 34, 404-417.—Each of 48 subjects was given ten repetitions of a list of 15 nonsense syllables and ten 30-sec. trials on a pursuit rotor. They were then divided into four groups and tested for retention after 1, 7, 28, and 70 days, respectively. The pursuit habit was superior to the nonsense syllable learning at each of the intervals. While almost no reminiscence was found in the case of the nonsense syllables, the average score on the pursuit rotor for the 1-day group was higher on the first relearning trial than it had been on the last learning trial. This reminiscence is explained in terms of the dissipation of decremental factors, such as fatigue and tension, that had depressed performance during the later trials of the original learning. Another factor of advantage to the motor learning is attributed to the more unitary nature of the task as well as to freedom from retroactive inhibition, i.e., freedom from the retroactive interfering effect of daily verbal behavior, which is believed to be involved in the nonsense syllable learning.—N. H. Pronko (Indiana).

351. Lehman, H. C. Man's most creative years; quality versus quantity of output. *Sci. Mon.*, N. Y., 1944, 59, 384-393.—Within any given field of endeavor, numerous age curves can be constructed which show the rise and fall of creative output at successive age-levels. The shape of any one of these curves is in part a function of quality of performance. Compared to quantity of performance, the peak representing quality is likely to be more narrow or pointed. Within any given field of endeavor, quality and quantity of output are not necessarily correlated, output of the very highest merit tending to fall off at an earlier age than does output of lesser merit.—E. Girden (Brooklyn).
352. LeShan, L. L., & Laird, L. A. Projected light pattern maze. *J. comp. Psychol.*, 1944, 37, 287-288.—An apparatus is described which is designed to study "the weightings of the various sense fields used by the rat in learning a maze." A shadow maze pattern is projected from lantern slides and reflected by a mirror onto the surface of a table. The table top is wired for electrical shock. Animals are trained to stay in the shadow path and are punished if they leave it. One rat learned to make 2 successive left turns in 21 daily sessions of 6 trials per day.—L. I. O'Kelly (U. S. Army).
353. McIntosh, J. R. Learning by exposure to wrong forms in grammar and spelling; an experimental study of the effect of correcting wrong forms as a practice method. *Teach. Coll. Contr. Educ.*, 1944, No. 892. Pp. vii + 61.—To test the theory that learning is handicapped by exposure to incorrect forms in English, study units in spelling and grammar were given to 190 seventh- and eighth-grade pupils of Public School No. 44, New York. Each study period was followed by a practice period. In practice, part of the population (Group A) was shown practice sentences with incorrect elements which the pupils were to recognize and/or correct. Group B was given the same sentences with blanks for completion instead of incorrect forms. Grammar and spelling tests (with reliabilities of .78 and .90, respectively) were given to both experimental groups at the beginning and end of the 6 weeks' experimental period and 4 weeks later. No significant differences were found between the practice methods of correcting incorrect forms and supplying correct forms in blanks. Mere recognition of incorrect forms, however, was significantly inferior to both of the immediately forementioned methods and continued to be so after the 4 weeks' interval. Where a word was recognized as incorrectly spelled, the correct spelling could be written in 97% of the cases. The author found no evidence that exposure to erroneous forms handicaps learning. Bibliography of 28 titles.—L. Birdsall (College Entrance Examination Board).
354. Metzner, C. A. The influence of preliminary stimulation upon human eyelid responses during conditioning and during subsequent heteromodal generalization. *Summ. doct. Diss. Univ. Wis.*, 1942, 7, 152-154.
355. Morgan, J. J. B., & Morton, J. T. The distortion of syllogistic reasoning produced by personal convictions. *J. soc. Psychol.*, 1944, 20, 39-59.—This investigation revealed: (1) that when the terms of a syllogism are of an abstract nature, or when the terms have little personal significance, the choice of conclusion depends more upon the structure of the syllogism than upon correct inference; (2) that when the terms are related to the individual's personal convictions, further distortion occurs, for a person "is likely to accept a conclusion which expresses his convictions with little regard for the correctness or incorrectness of the inferences involved."—F. W. Finger (Virginia).
356. Rosenthal, B. G. Hypnotic recall of material learned under anxiety- and non-anxiety-producing conditions. *J. exp. Psychol.*, 1944, 34, 369-389.—Thirteen undergraduates, ranging in susceptibility to hypnosis from medium to deep on the Davis-Husband scale, served as subjects in a series of 7 experiments designed to compare the recall of emotion-provocative material in meaningful and nonsense contexts; to compare nonsense material recall with meaningful recall; and to compare successful and failed items in waking recall, noting whether the recall of the last two items can be improved under hypnosis. Results indicate no hypermnesia (hypnotic or waking) for nonsense syllables as reported by previous investigators, nor for meaningful words in nonsense syllable lists. Disparaged or failed items did show a hypnotic hypermnesia, but successful items showed no hypermnesia either under hypnosis or in the waking state. Recall of poetry learned in the waking state showed hypermnesia but not for the waking recall of the same material. "Poetry learned under success-failure conditions showed no hypermnesia in either state for either 'successful' or 'failing' poems." Neither profane nor innocuous words showed recall differences in either condition; however, failed tasks did show a hypnotic hypermnesia.—N. H. Pronko (Indiana).
357. Shaw, F. J. Two determinants of selective forgetting. *J. abnorm. soc. Psychol.*, 1944, 39, 434-445.—Twenty-nine psychology students rated themselves on a list of 45 adjectives. A week later they were shown bogus ratings of themselves, presumed to be genuine. Another week later they were asked to recall the ratings and to mark the adjectives as desirable or undesirable. Fewer errors were made on ratings that were favorable and that agreed with self-ratings.—C. M. Harsh (Nebraska).
358. Thompson, M. E. An experimental investigation of goal orientation as a factor in maze learning by the white rat. *J. comp. Psychol.*, 1944, 37, 289-296.—The writer objects to the hypothesis of goal orientation as a factor in the maze learning of the rat. An analysis of data from experiments in the endless maze failed to show a consistent tendency toward goal orientation and did show a more rapid learning of non-goal-pointing positions. It is concluded that the phenomenon of goal orientation can be in part explained in terms of the anticipatory response.—L. I. O'Kelly (U. S. Army).
359. Thompson, M. E. An experimental investigation of the gradient of reinforcement in maze learning. *J. exp. Psychol.*, 1944, 34, 390-403.—One hundred sixty-seven female albino rats were trained to run a one-choice-point maze with alleys varied from 2 to 60 ft. in length, in an attempt to determine whether the discriminability between pathways of different length would be constant for different ab-

absolute lengths when their ratios were constant or whether discriminability would vary with the absolute length of the pathways. Situations involving three long-short path ratios indicate that both mean number of errors and median trials are a function of the absolute lengths of the paths as well as the ratios. "The results agree with the exponential assumption in so far as (1) the curves for the smaller ratios show a maximum discriminability at a central point of absolute lengths, which diminishes with both increase and decrease in path length, and (2) in general the point of maximum ease of discrimination shifted toward the longer path length on the finer ratios."—*N. H. Pronko* (Indiana).

360. Tilton, J. W. "Effect," as determined by initial strength of response. *J. gen. Psychol.*, 1944, 31, 277-281.—In principle, it is impossible for punishment to weaken an association that is already as weak as it can be. Data are presented showing that (within a range where initial strength varies from 35 to 60% of repetition in a situation where 25% repetition is the amount expected by chance) the *r* of initial strength is positive with the effect of "wrong" and probably is also positive with the effect of "right."—*G. W. Hartmann* (State College, Pa.).

361. Welsh, B. L., & Waters, R. H. Finger versus stylus learning of the same maze. *J. gen. Psychol.*, 1944, 31, 283-286.—Thirty subjects traced the Warden 10-unit maze with a metal stylus, and the same number used the index finger instead. When compared for time, errors, and errorless runs, the finger learners were consistently better. The Husband-McGeoch hypothesis that the finger method reduces the need for trial-and-error exploration is considered supported.—*G. W. Hartmann* (State College, Pa.).

[See also abstracts 312, 319, 393, 394, 410, 420, 421, 440, 455, 459, 475, 476, 493, 551, 553, 555, 563, 564, 575, 583, 588.]

MOTOR AND GLANDULAR RESPONSES

(incl. Emotion, Sleep)

362. Berg, I. A. Development of behavior: the micturition pattern in the dog. *J. exp. Psychol.*, 1944, 34, 343-368.—The micturition pattern of each of 22 dogs, 16 males and 6 females, was observed on alternate days, and a motion-picture record was obtained once a week. From an analysis of the data the authors conclude: "1. Leg-elevation of adult male dogs during urination is unlearned. 2. A cephalo-caudal direction of development in locomotion precedes leg-elevation in adult male dogs. The leg-elevation pattern follows a proximo-distal direction of development. This pattern is individualized, progressing through readily discernable stages from gross to specific activity. 3. The presence of sex hormones such as testosterone is directly related to the emergence of the leg-elevation pattern in the male dog. 4. Leg-elevation behavior in adult males can be disrupted by treatment with certain female sex hormones. 5. Some dogs reveal a preference as to elevating the right or left leg, at least during the first nine months of life."—*N. H. Pronko* (Indiana).

363. Bloomfield, A., & Tainter, M. L. The effects of vitamin B deprivation on spontaneous activity of the rat. *J. Lab. clin. Med.*, 1943, 28, 1680-1690.—Limitation of vitamin B is promptly followed by increased activity in the running cage. After 5-10 days, long before signs of deficiency appear, activity declines sharply. This is not due to inanition, since control fasted rats on constant vitamin B intake continue normally active. When rats whose diet has been deficient either in vitamin or total calories are given unlimited food and adequate vitamins, a sudden fall in activity occurs, which persists during the period of increased intake. The initial increased activity is not "nervousness" but possibly a drive to find an adequate diet. The subsequent drop is specifically related to vitamin deficiency. The decrease following restoration of vitamins or unlimited calories is an expression of satiety. The application of these results to human nutrition is that, when only a small bulk of food is available, adequate vitamins are as important as calories and that altered behavior may precede any other evidence of vitamin deficiency and in fact be the only symptom in the subclinical forms.—*M. E. Morse* (Baltimore, Md.).

364. Bolen, H. L. The emotional factor in peptic ulcer. *Rev. Gastroenterol.*, 1943, 10, 187-191.—A study is reported in which comparison is made of gastric analyses of two groups of patients, 40 with chronic peptic ulcer of long duration and 40 patients of nervous type with ulcer symptoms which disappeared after the emotional factor had been removed. The majority of patients in both groups showed an excess of free gastric acidity. In the group whose symptoms were related to emotional strain, there was a definite decrease in free HCl and in total acidity when the specific emotional disturbance was removed. The author suggests the importance of treating peptic ulcer early and of removing the factor of emotional strain whenever possible.—*M. M. Simpson* (Wisconsin).

365. Brozek, J. A new group test of manual skill. *J. gen. Psychol.*, 1944, 31, 125-128.—The speed of hand and arm movements in repeatedly dropping a ball-bearing through a 6-inch pipe with a counter and catch-net attached yielded correlations between one-minute scores of about .75. The apparatus is described and sketched.—*G. W. Hartmann* (State College, Pa.).

366. Calma, I., & Wright, S. Action of acetylcholine, atropine and eserine on the central nervous system of the decerebrate cat. *J. Physiol.*, 1944, 103, 93-102.—The results with acetylcholine on muscle tone in the decerebrate cat are essentially the same as those obtained by Bülbring on the isolated perfused spinal cord of the dog (see 16: 1791). Intra-arterially injected acetylcholine causes a discharge from the central nervous system which increases the tone of the innervated quadriceps. Atropine annuls the central excitatory effect of acetylcholine. Later "spontaneous" changes in tone may occur. The outstanding feature of the results with eserine was their unpredictability. Eserine was excitatory to the central nervous system of the decerebrate cat in some experiments; in others, no changes in muscle tension were produced. Attention is drawn to the striking differences in the

action of these drugs in different species, with different preparations, and under different anesthetics.—*M. E. Morse* (Baltimore, Md.).

367. Detwiler, S. R. Behavior in *Amblystoma* larvae lacking forebrain, eyes, and nasal placodes. *Proc. Soc. exp. Biol.*, N. Y., 1944, 56, 195-196.—The author studied the development of feeding behavior in *Amblystoma* larvae from which the forebrain, eyes, and nasal organs had been removed while the embryos were in the Harrison stage, 21. Those surviving up to or beyond the feeding stage devoured daphnia and enchytraeid worms and snapped at other moving objects. All relevant motor activities, such as lurching, engulfing, chewing, and swallowing, were carried out in normal, integrated manner, but with less than normal vigor. However, general locomotor activity, as well as the more specialized foraging behavior, was considerably reduced in amounts. Because of this, the total intake of food was reduced and, consequently, rate of growth retarded. Although lateral line organs constitute a partially adequate receptor mechanism for the detection of food in motion and their development may go on in the absence of the forebrain, it is apparent that only when the forebrain is intact can sightless and tasteless larvae obtain sufficient food for normal rate of growth.—*C. P. Stone* (Stanford).

368. Fischer, E. Vertebrate smooth muscle. *Physiol. Rev.*, 1944, 24, 467-490.—*M. E. Morse* (Baltimore, Md.).

369. Fleming, A. J. The hypothalamus and human emotions. *Delaware St. med. J.*, 1944, 16, 1-13.—Most of the elaborate defense mechanism of the hypothalamus is not needed in civilized life and only interferes with reasoning ability by impressing its feeling tone on the higher centers. Its overstimulation by external stimuli, fears, and conflicts produces emotional turmoil. It can be protected by the frank realization that, although a function cannot be discarded completely, it can be so modified that it no longer resembles its primitive ancestor and normal enjoyment can be found in its satisfaction.—*M. E. Morse* (Baltimore, Md.).

370. Hanawalt, N. G. The rôle of the upper and the lower parts of the face as a basis for judging facial expressions: II. In posed expressions and "candid-camera" pictures. *J. gen. Psychol.*, 1944, 31, 23-36.—Considering full-face interpretations of 20 Ruckmick-Stoelting poses as correct, the author found that lantern-projected separate lower-half and upper-half pictures both yielded more incorrect responses, each to about the same mean extent; but some emotional states, because of confusion with others, were better detected by the top half than by the bottom and vice versa. Subjects were three different groups of undergraduate women. The same state of affairs obtained with 20 spontaneous or unposed candid-camera shots, derived largely from *Life* magazine. The lower half was consistently better for happiness and mirth, and the upper half for surprise and fear; suffering, love and interest, anger and determination, and contempt yielded no differences between the halves, even when conventional paintings and sculptures were included. Interpretation of expressions occurred without knowledge of the situation and even on the basis of but

part of the countenance. Happiness was most easily identified; contempt, the hardest. (See also 17: 105.)—*G. W. Hartmann* (State College, Pa.).

371. Holmes, S. J. The problem of organic form. II. Competition as an integrative force. III. The problem of divergent differentiation. *Sci. Mon.*, N. Y., 1944, 59, 253-260.—Morphogenesis is largely a result of physiological balancing that implies a tendency to settle into a state either of immobility or of action which runs along a fairly even course. Functional and formative activities of living organisms regulate themselves in ways that are fundamentally akin to those involved in ordinary chemical transformations. "Despite many contentions to the contrary, ontogeny per se involves no striving toward a living or self-perpetuating goal. It may be quite as much a striving to produce an amorphous heap of cells as a viable organism. What it effects depends upon its outfit of genes. It owes the adaptiveness of its goal to its phylogenetic history."—*E. Girden* (Brooklyn).

372. Lindemann, E. Symptomatology and management of acute grief. *Amer. J. Psychiat.*, 1944, 101, 141-148.—This paper is based on a series of psychiatric interviews with 101 patients. The author emphasizes that acute grief is a definite syndrome with psychological and somatic symptomatology.—*J. E. Zerga* (Walt Disney Productions).

373. Muralt, A. v. Physiologische Gesichtspunkte zur Frage der Ermüdung. (The physiological point of view on fatigue.) *Dtsch. med. Wschr.*, 1941, 67, 1337-1340.

374. Proppper-Grashchenkov, N. I. [Problem of the sleep center.] *Neuropat. Psikhiat.*, 1943, 12, No. 1, 8-15.

375. Scheinfeld, A. Women and men. New York: Harcourt, Brace, 1944. Pp. xx + 453. \$3.50.—The basic sex differences are examined in great detail from conception to maturity. The relation of these differences to behavior patterns, capacities, and activities of the two sexes is indicated and discussed at length. The interaction of environment and training with biological factors is also described. Although this is primarily a review of the work which has been done in this field, the author also presents a great deal of original research.—*G. S. Speer* (Central YMCA College).

376. Steinman, A. R. Reaction time to change compared with other psychophysical methods. *Arch. Psychol.*, N. Y., 1944, No. 292. Pp. 60.—This is a study of the adequacy of simple reaction time (RT) to change in brightness as a psychophysical method. Four experiments are reported: I, RT as a function of the magnitude of change and stimulus intensity; II, an investigation of limens; and III, IV, the effects of direction of change upon RT and upon judgments of magnitude. The first two experiments employed a modified Thorne photometer, in which a brief standard illumination on a ground-glass plate was followed by the brief variable illumination. Level of stimulation was varied by filters before the exposure plate. There were 40 reactions in each of 32 stimulus conditions. To conduct experiments III and IV, a somewhat different set-up, employing an episcotister or a hand-switch, was necessary to control the on- and

off-time factor in the stimulus source. Some major findings are as follows: (1) RT decreased as magnitude of change increased, seemingly according to a hyperbolic function. (2) For a constant stimulus-ratio, RT decreased with increased intensity, then increased (possibly an adaptation phenomenon). (3) The SD of RT was about constant at larger magnitudes of change, but increased with decreased magnitude or intensity. (4) RT was faster for decrements than for objectively equal increments. (5) The adequacy of this method was shown by favorable comparisons with previous data (secured by other methods), in terms of equal-perceptibility contours and threshold measurements. Bibliography of 25 titles.—C. E. Buxton (Iowa).

377. Young, J. H. The effects of faradically induced currents upon the extrinsic and intrinsic ocular musculature. *Brit. J. Ophthalmol.*, 1944, 28, 488-502.—The phenomena resulting from faradic stimulation (self-experiment) of the left internal rectus muscle are described in detail: (a) under cocaine anesthesia and (b) under cocaine and homatropine anesthesia and mydriasis. The physiology of the reactions experienced is discussed. Faradically induced electrical currents have been shown to be capable of producing three important ocular signs, namely, exophthalmos, nystagmus, and spasm of accommodation via the mediation of the autonomic system.—R. J. Beitel, Jr. (Dartmouth Eye Institute).

[See also abstracts 313, 316, 322, 331, 341, 350, 356, 386, 411, 425, 434, 445, 483, 533, 551, 574, 585.]

PSYCHOANALYSIS, DREAMS, HYPNOSIS

378. Brill, A. A. Freud's contribution to psychiatry. New York: Norton, 1944. Pp. 244. \$2.75.—In his preface the author describes this book, containing the 1943 Salmon Lectures, as his psychiatric biography, not a compendium of Freud's work but rather a résumé of the author's own experiences in relation to the development of psychoanalysis. The following topics are discussed: descriptive and interpretive psychiatry; Breuer's cathartic method, the precursor of psychoanalysis; the sexual etiology of the neuroses; Freud's classification of the neuroses; the Zurich school and psychoanalysis; paranoia and its relation to homosexuality; polymorphous perversities in paranoid states; determination of the selection of neuroses; the struggle of the psychic forces in the neuroses; mourning, melancholia, and compulsions; psychoanalysis, art, and religion; religion and traumatic neurosis; repetition compulsion; consciousness and instinct; and the paleopsychologist of the mind.—M. H. Erickson (Eloise Hospital).

379. Erickson, M. H. An experimental investigation of the hypnotic subject's apparent ability to become unaware of stimuli. *J. gen. Psychol.*, 1944, 31, 191-212.—Two naturalistic sessions are analyzed: (1) A deeply hypnotized subject was instructed to become unaware of two persons on the visual, auditory, and tactile levels; the behavior occurred as suggested, but its completeness depended upon the time interval allowed for the development of the suitable "mental set." (2) A similar subject was told to develop a somnambulistic state but to simu-

late ordinary waking behavior; an expert hypnotist, who was later introduced to the session, correctly detected characteristic alterations of behavior to the subject's embarrassment at his inability to follow instructions faithfully. Changed behavior of the spectator group when a "negatively hallucinated" guest appeared was observed by the subject but not understood, forced but possible rationalizations being offered in explanation of the total situation. Hypnotized subjects can respond adequately without being restricted to the passively responsive behavior so often regarded as a criterion of the trance state.—G. W. Hartmann (State College, Pa.).

380. Foxe, A. N. Five as a symbol. *Psychoanal. Rev.*, 1944, 31, 453-456.—For the genitally mature, the number five may be a symbol of the union of the sexes, since it contains the male number, three, and the female number, two. For the genitally immature, it is still an important number, symbolizing the various means of attack, that is, the arms, legs, and penis.—L. B. Heathers (Smith).

381. Humphrey, B. M. Paranormal occurrences among preliterate peoples. *J. Parapsychol.*, 1944, 8, 214-229.—Several anthropological anecdotes concerning allegedly extrasensory events observed among preliterate groups are reviewed.—F. W. Finger (Virginia).

382. Humphrey, B. M., & Rhine, J. B. Position effects in the Soal and Goldney experiment. *J. Parapsychol.*, 1944, 8, 187-213.—In the original study, the subject tried to identify the one of 5 target cards upon which the experimenter, in another room, was concentrating his attention. In this analysis, it is found that the success declines in systematic fashion both during an individual test session and over the whole series of sessions. This is interpreted as significant confirmation of the extrachance nature of the ESP phenomenon.—F. W. Finger (Virginia).

383. Malabia, P. Sobre el instinto de la muerte. (On the death instinct.) *Act. esp. Neurol. Psiquiat.*, 1941, No. 4.—[Abstracted review; original not seen.] Freud's death instinct is clearly inapplicable to circumstances such as railroad accidents. Nor is the concept related, as is claimed, to any typical current of Greek thought. In many instances, what has been regarded as the death instinct should be interpreted as anxiety over the possibility of annihilation.—H. D. Spoerl (Jeffersonville, Vt.).

384. Wisdom, J. O. The lust for power in Hedda Gabler. *Psychoanal. Rev.*, 1944, 31, 419-437.—Hedda Gabler is interpreted analytically. She hated and desired to dominate both men and women. Women were imperfect males who, by their warmth and femininity, threatened her position of power dominance over men. Men were, like her father, weak creatures who were accepted only so long as her relationship with them remained on a nonsexual level.—L. B. Heathers (Smith).

[See also abstracts 311, 356, 399, 451, 471, 479.]

FUNCTIONAL DISORDERS

385. Acklesberg, S. B. Vocabulary and mental deterioration in senile dementia. *J. abnorm. soc. Psychol.*, 1944, 39, 393-406.—Fifty senile dementia

cases in a Connecticut State Hospital were given Capps' five tests of synonyms, antonyms, categorization, word naming, and homographs. The cases were selected for average early ability and training and ranged from 60 to 85 years of age. There was a progressive reduction of synonym and antonym scores corresponding to the investigator's ratings of degree of deterioration of the patients. This suggests that vocabulary deteriorates with other mental functions. The deterioration in epilepsy and senile dementia may differ from that in schizophrenia and manic-depressive psychoses.—C. M. Harsh (Nebraska).

386. Agoston, T. Experimental administration of benzedrine sulfate and other central stimulants in psychoanalyses and psychotherapies. *Psychoanal. Rev.*, 1944, 31, 438-452.—L. B. Heathers (Smith).

387. Alvarez, W. C. What is the matter with the patient who is always tired? *W. Va. med. J.*, 1944, 40, 309-314.

388. Anderson, J. O. Aphasia from the viewpoint of a speech pathologist. *J. Speech Disorders*, 1944, 9, 209-226.—A summary is given of the relations between localized cerebral lesions and types of aphasia. "There seems to be a general language zone in the brain within which several specialized areas for more or less specific linguistic functions may be designated." However, the functioning of the entire brain is requisite for normal linguistic activity. It seems unsatisfactory at the present to attempt a classification of pure aphasic types; rather, aphasia is to be considered a basic disorder which may exhibit any combination of manifestations, divisible into expressive, receptive, associative, and mixed groups.—F. W. Finger (Virginia).

389. Anderson, J. O. Aphasia from the viewpoint of a speech pathologist. *Summ. doct. Diss. Univ. Wis.*, 1942, 7, 259-262.—See 19: 388.

390. Bender, J. F. Do you know someone who stutters? *Sci. Mon.*, N. Y., 1944, 59, 221-224.—"Perhaps the most significant single item in the correction of stuttering is the rapport established between the stutterer and his correctionist."—E. Girden (Brooklyn).

391. Bergler, F., & Knopf, O. A test for the differential diagnosis between retirement neurosis and accident neurosis. *J. nerv. ment. Dis.*, 1944, 100, 366-380.—Young, healthy individuals who desire to retire from working as soon as possible, even though it means living on a very meager income, and who, once their freedom from work is attained, do not enjoy it but become depressed are said to have retirement neuroses. Analytically such persons are fixated at the oral stage. They unconsciously provoke disappointment and cloak their masochistic pleasure by aggressive behavior directed towards the apparent disapprover. It is suggested that accident neuroses and malingering may be distinguished from retirement neuroses by the greater amount of oral involvement in the premorbid personality of the latter. Two case histories are presented.—L. B. Heathers (Smith).

392. Blum, G. S., & Rosenzweig, S. The incidence of sibling and parental deaths in the anam-

nesis of female schizophrenics. *J. gen. Psychol.*, 1944, 31, 3-13.—This study supplements an earlier report which indicated that male schizophrenics have apparently twice as much chance of experiencing sibling deaths as certain control groups (see 17: 2020). The present findings only partially confirm the former. The percent of sibling deaths during the subject's childhood or adolescence for female schizophrenics was greater than for normals, but an equal-sized group of manic-depressives gave a smaller percent than the control normals. Parental deaths occur significantly more often than in normals, and they are found to trend more toward the paternal side for male schizophrenics and toward the maternal one for the females.—G. W. Hartmann (State College, Pa.).

393. Brody, M. B. Prolonged memory defects following electro-therapy. *J. ment. Sci.*, 1944, 90, 777-779.—Five cases are recited to illustrate memory defects lasting a year or more and affecting long familiar material, particularly names of persons and places and habits of work, in patients fully recovered from their other symptoms. It implies permanent or semipermanent brain damage which may later have untoward consequences.—W. L. Wilkins (U. S. Naval Reserve).

394. Campbell, A. M. G., & Cross, A. G. Ocular neurosis. *Brit. J. Ophthalm.*, 1944, 28, 394-402.—An examination of 500 cases attending a Service ophthalmic clinic in wartime showed that 34% were psychogenic rather than organic in nature. Earlier data had indicated only 15% psychogenic cases in peacetime. Many cases had shown psychoneurotic tendencies (other than ocular) during civilian life. The most common ocular symptoms found were diplopia (both binocular and monocular), triptopia, photophobia, night blindness, amblyopia, restricted and irregular visual fields, asthenopia, and paralysis of ocular muscles. These conditions were variable: diplopia would often occur only during landing of aircraft, night blindness only during air raids, photophobia often existed only for the few days following a night air attack over Berlin (especially when the plane was spotted by search lights), while amblyopia and the visual fields both varied with the distance of the test charts during the examination. Many cases were cured of their ocular symptoms by psychotherapy, although many developed other symptoms (not necessarily ocular) at a later date.—G. W. Knox (U. S. Naval Reserve).

395. Cohen, R. R. Visual aids in preventive psychiatry. *War Med.*, Chicago, 1944, 6, 18-23.—When a mass of new information is to be imparted in a limited time to many men of widely differing intelligence and experience, without background in the subject, visual aids are very effective. Cohen reproduces drawings and a cartoon booklet which he has used successfully in mental hygiene talks to inductees, and he discusses the factors to be considered in devising such material. The pictures have been criticized as naïve, but they serve their purpose only if they are limited to the simplest points and if these are made concrete and colorful, even though it may be necessary to be unscientific. The American soldier is particularly amenable to learning from pictures, since from childhood he has been the re-

cient of skilful advertising and a follower of the comics. In fact, the latter are one of the most widely and enthusiastically read forms of literature in the armed forces.—*M. E. Morse* (Baltimore, Md.).

396. Deutscher, M. The clinical psychologist in an AAF mental hygiene unit. *Psychol. Bull.*, 1944, 41, 543-547.—The purposes, personnel, and procedures of the Mental Hygiene Unit at Drew Field are described.—*S. Ross* (U. S. Naval Reserve).

397. Ebaugh, F. G. A review of the drastic shock therapies in the treatment of the psychoses. *Ann. intern. Med.*, 1943, 18, 279-296.—Ebaugh reviews insulin, metrazol, and electric shock therapies, their historical development, indications for each, methods, and possible mechanisms of improvement. Their mode of action is unknown, but Ebaugh believes that, in the case of insulin at least, the basis of improvement is not biochemical so much as psychotherapeutic. Some cortical damage, secondary to vascular changes and usually reversible, occurs with metrazol and electric shock. Brain waves show the characteristic arrhythmia, which in successful cases gradually disappears. The extreme enthusiasm of the early days has given way to careful appraisal.—*M. E. Morse* (Baltimore, Md.).

398. Ebaugh, F. G., & Brosin, H. W. Traumatic psychoses. *Ann. intern. Med.*, 1943, 18, 666-696.—The authors discuss the forensic aspects of traumatic delirium, posttraumatic personality disorder, and posttraumatic dementia. Physical indicators are inadequate to measure the damage to a patient's capacities and personality organization, but psychological means can often demonstrate deterioration long after superficial clinical recovery. There are powerful compensatory capacities, and, with equally severe injuries, the patient with the better integration will make the better recovery. Although the older dominant personality patterns provide a stable reality axis, they are socially disarming and liable to obscure the real extent of the psychic loss. The most rewarding cases for study of cerebral function by methods hitherto unavailable are war injuries and tumor and lobotomy cases. The questions discussed include differentiation between organic and neurotic behavior patterns, amnesia, legal responsibility, dynamics of the organic syndrome and deterioration, and methods of distinguishing true organic defect, even though obscured by compensatory mechanisms. Although all methods have merit, the authors believe that the qualitative are the most promising.—*M. E. Morse* (Baltimore, Md.).

399. Erickson, M. H. The method employed to formulate a complex story for the induction of an experimental neurosis in a hypnotic subject. *J. gen. Psychol.*, 1944, 31, 67-84.—A detailed commentary is presented, giving a word-by-word explanation of a fabricated story as told to a hypnotic subject. The story paralleled or symbolized the patient's actual neurosis. "Essentially, the task, as worked out, was comparable to that of composing music intended to produce a certain effect upon the listener. Words and ideas . . . were employed in selected sequences, patterns, rhythms, and other relationships, and by this composition it was hoped to evoke profound responses in the subject. These

responses were to be of a type not only hoped for in terms of what the story could mean but which would be in accord with the established patterns of behavior deriving from the patient's experiential past." The case was reported in the 1935 *Brit. J. med. Psychol.* (see 9: 3748).—*G. W. Hartmann* (State College, Pa.).

400. Feldman, F., & Cameron, D. E. Speech in senility. *Amer. J. Psychiat.*, 1944, 101, 64-67.—"The speech of psychotic senile patients was analyzed grammatically, and compared with that of normal adults and children. Pronouns, verbs and adjectives display the most prominent differences between the senile and the normal subjects. Pronouns are used relatively more often in seniles, verbs also more often, and adjectives less frequently." The implications of these differences are discussed.—*J. E. Zerga* (Walt Disney Productions).

401. Fuson, W. M. Social isolation and mental disorders; a statistical study based on Kansas data. *Summ. doct. Diss. Univ. Wis.*, 1942, 7, 162-164.

402. Gillman, R. D., & Ramsey, G. V. AAF convalescent-rehabilitation program. *Psychol. Bull.*, 1944, 41, 548-550.—The functions and methods of the AAF Convalescent-Rehabilitation Center are described.—*S. Ross* (U. S. Naval Reserve).

403. Gutiérrez Noriega, C. Contribución de Cervantes a la psicología y a la psiquiatría. (Cervantes's contribution to psychology and psychiatry.) *Rev. Neuro-Psiquiat.*, Lima, 1944, 7, 149-190.—At a time when mental derangement was generally viewed as arbitrary diabolical intervention, Cervantes portrayed aberrant personalities in terms of maladjustment to the social setting. He recognized that psychoses need not involve impairment of intelligence, and in at least one instance he presented what is virtually a psychiatric test. Some of his fictional characters seem to have been introduced almost as case studies. A versatile grasp of psychiatric situations is shown in the diversity of derangements portrayed. Cervantes was truly a predecessor of Pinel and Esquirol. His conception of the personality is in line with very recent considerations.—*H. D. Spoerl* (Jeffersonville, Vt.).

404. Halstead, H. Mental tests in senile dementia. *J. ment. Sci.*, 1944, 90, 720-726.—A scale of 25 mental tests (see 18: 1378) was given to 18 cases of senile dementia of CA 70 to 83. All tests differentiated between the demented and the standardization group. Median MA for demented on 13 tests was 7 ± 1.5 years.—*W. L. Wilkins* (U. S. Naval Reserve).

405. Haskell, R. H. The development of a research program in mental deficiency over a fifteen-year period. *Amer. J. Psychiat.*, 1944, 101, 73-81.—The development of a research program in mental deficiency, over a 15-year period, at the Wayne County Training School, Michigan, is presented. The fields of social science, psychology (including psychopathology), education, and medicine are briefly reviewed, and the main problems involved in relation to mental deficiency are discussed. A bibliography of 81 titles is appended.—*J. E. Zerga* (Walt Disney Productions).

406. Hill, H. Stuttering: I. A critical review and evaluation of biochemical investigations. *J. Speech Disorders*, 1944, 9, 245-261.—A review of the literature on biochemical comparisons of stutterers and non-stutterers indicates that some slight differences may obtain, e.g., in blood calcium and phosphorus, in red and white blood cell count, and in excreted creatinine. Whatever chemical differences there may be, however, should be interpreted as coincident with differences in affective and muscular activity. "And, although the resultant changes may influence behavior through increasing or decreasing irritability, thus acting as stimuli in S → R functioning, they cannot be construed as the direct causal antecedents of psychological activity." It seems probable that stuttering "occurs on the basis of the normal functioning of a normal neurophysiological mechanism." 49-item bibliography.—F. W. Finger (Virginia).
407. Hirschberg, C. Neurology and psychiatry: psychoneuroses in military personnel. *Amer. J. med. Sci.*, 1944, 208, 119-132.—Neuroses occurring in military personnel are considered under the following topical headings: (1) scope of the problem; (2) clinical syndromes; (3) factors which tend to precipitate a psychoneurosis in military personnel; (4) psychopathology of neuroses in military personnel; (5) treatment; (6) prognosis; (7) results of treatment; and (8) rehabilitation of the neurotic service man after discharge. Bibliography of 128 titles.—M. M. Simpson (Wisconsin).
408. Huber, M. A phonetic approach to the problem of perception in a case of Wernicke's aphasia. *J. Speech Disorders*, 1944, 9, 227-237.—In an attempt to analyze the perceptual difficulties of an aphasic subject, speech samples were taken of the attempted repetitions of the examiner's singly-presented vowels, consonants, and words. The responses are summarized in phonetic form, and suggestions are made concerning the acoustic training in verbal perception for receptive dysphasics.—F. W. Finger (Virginia).
409. Hunt, W. A. The psychologist in the psychiatric program at the Naval Training Stations. *Psychol. Bull.*, 1944, 41, 557-560.—The general functions of the psychologist in a Psychiatric Unit are presented with particular reference to the subsidiary responsibilities involved. The place of the psychologist as a psychiatric adjunct is discussed.—S. Ross (U. S. Naval Reserve).
410. Kao, C. C., & Lyman, R. S. The role of eidetic imagery in a psychosis. *J. nerv. ment. Dis.*, 1944, 100, 355-365.—Previous studies on the appearance of eidetic images in patients with or without hallucinations at earlier or later periods during their illnesses are discussed briefly. One case of a patient with paranoid delusions is described in detail to show the role played by her vivid eidetic imagery in building up and maintaining her delusions. This patient had no hallucinations.—L. B. Heathers (Smith).
411. Kennard, M. A., Bueding, E., & Wortis, S. B. Some biochemical and electroencephalographic changes in delirium tremens. *J. nerv. ment. Dis.*, 1944, 100, 409-410.—Abstract.
412. Krapf, E. E. La despersonalización desde el punto de vista de la psicopatología general. (Depersonalization from the point of view of general psychopathology.) *Rev. Univ. B. Aires*, 1944, 2, 59-64.—Especially for the purposes of psychopathology, depersonalization is essentially a state involving the person rather than the personality, with the person, however, considered in relation to a life context. It is concluded tentatively to be a force enabling an affective disturbance (temporal) to become less productive of anxiety, and transforming it into a perceptual disturbance (spatial). Depersonalization may be said to occur in spite of the ego, rather than as a renunciation of it.—H. D. Spoerl (Jeffersonville, Vt.).
413. Krapf, E. E. Los disfrénicos; personalidades psicopáticas; su concepto y clasificación. (Dysphrenics; psychopathic personalities; their nature and classification.) *Sem. méd., B. Aires*, 1944, 51, 309-316.—Psychopathic personalities must be regarded in physiological as well as psychological terms, but Stern's concept of psychophysical neutrality is not fruitful, because this is not a matter of neutrality. The term dysphrenic is proposed to replace psychopathic personality. A return to the systematic outlook of J. L. A. Koch is recommended in characterizing the groups belonging to the new conception. The main divisions are: primitive (personalities), infantile (personalities), and asthenics; and several subdivisions correspond more or less to accepted syndromes.—H. D. Spoerl (Jeffersonville, Vt.).
414. Layman, J. W. Reconditioning program: Army general hospitals. *Psychol. Bull.*, 1944, 41, 515-518.—The general system of patient classification into four principal groups, according to current medical and/or physical condition, is described. For purposes of the reconditioning program, however, patients may be grouped into two major categories: less than or more than 90 days' hospitalization. The objectives of the program are considered under the following headings: physical, education, occupational therapy, and classification.—S. Ross (U. S. Naval Reserve).
415. Levin, M. Military aspects of narcolepsy. *War Med., Chicago*, 1944, 6, 162-165.—The subject is reviewed in relation to 25 soldiers who were discovered asleep on sentinel duty. Four were rebellious psychopaths who went to sleep intentionally; 19 were normal men who came on post insufficiently rested; and 2 had narcolepsy. This is, in most cases, an idiopathic disorder which can be kept in abeyance by amphetamine sulfate. Levin interprets the somnolence in the light of physiologic processes incident to suppression of the impulse to escape and comparable to Pavlov's conditioned inhibition. As sleep is a state of widely irradiated inhibition, narcolepsy may be due to excessive susceptibility of the cortex in this respect. The significance of narcolepsy, manifest or latent, is not limited to military life; it occurs also in both major and minor crises of civilian life. When suppression of impulses is no longer necessary, sleepiness disappears. Other mechanisms causing irresistible sleepiness are the cumulative effect of inhibitions necessary for differentiation of complex stimuli and the continual in-

hibition of well-established reflexes.—*M. E. Morse* (Baltimore, Md.).

416. Lewis, N. D. C. The prognostic significance of certain factors in schizophrenia. *J. nerv. ment. Dis.*, 1944, 100, 414-419.—Abstract and discussion.

417. Milton, E. O., Jr. A study of 363 cases of institutional behavior problems in a drug addict population. *J. gen. Psychol.*, 1944, 31, 15-22.—The average age of the general hospital population was 39.1 years; the average age of the "adverse behavior" group (as judged from the custodial and psychiatric viewpoints) was 35.01 years; the average age of the one-violation group was 35.83 and that of the repeater group, 32.82. Over a third of all patients were guilty of disciplinary offenses upon more than one occasion, colored inmates being the most mal-adjusted. There was no difference between the mean mental ages of the adverse and non-adverse groups. Adverse behavior occurred most frequently near the beginning of the incarceration. Those who repeated adverse behavior tended upon their first violation of regulations to commit the most serious offenses.—*G. W. Hartmann* (State College, Pa.).

418. Mitchell, M. B. The clinical psychologist in a Naval hospital. *Psychol. Bull.*, 1944, 41, 561-564.—The place and functions of the clinical psychologist in the organization of a Naval hospital are discussed.—*S. Ross* (U. S. Naval Reserve).

419. Moreno, J. L. A case of paranoia treated through psychodrama. *Sociometry*, 1944, 7, 312-327.—This is the complete text of a paper presented in abridged form in the *Proceedings of the Second Brief Psychotherapy Council* (see 18: 3514). A female patient had developed a systematic delusion about a potential lover. She resisted completely the usual therapeutic measures, insisting on her own sanity. Moreno effected a kind of cure by means of psychodrama. He started with a deliberate confirmation of her delusion, even to the point of "producing" the lover as a correspondent, and eventually as a "real" husband via an auxiliary-ego in a proxy wedding. Later, transference was effected first to the auxiliary-ego himself and subsequently to a real partner in the community. Although still essentially a double personality, she has worked out an adjustment whereby one role does not interfere with the other, and she has been able to resume community employment.—*S. B. Williams* (U. S. Naval Reserve).

420. Muench, G. A. A follow-up of mental defectives after eighteen years. *J. abnorm. soc. Psychol.*, 1944, 39, 407-418.—Eight men who had been classed as mentally defective in 1925 were re-tested with three mental tests and two literacy tests. Although the literacy tests showed no significant improvement, the mental test averages were all significantly higher. Increase of Binet IQ correlated .66 with ratings of social adjustment. Seven of the men are married, all have acceptable jobs, and none has an adult court record. It is suggested that mental defectives may respond better to good training in the society than to institutional care.—*C. M. Harsh* (Nebraska).

421. Rabin, A. I. The relationship between vocabulary levels and levels of general intelligence in psychotic and non-psychotic individuals of a wide age-range. *J. educ. Psychol.*, 1944, 35, 411-422.—

The Wechsler-Bellevue test scores and the Form L vocabulary of the 1937 Terman and Merrill Revision of the Binet test were given to 268 patients in a state hospital. The ages of the subjects ranged from 15 to 69. The IQ's indicated by the two tests gave a correlation of $r = .78$. Discrepancies between the two scores were studied. The vocabulary test over-estimates the intellectual level (i.e., gives higher scores than the Bellevue test), the differences being smallest at the teen-age level and largest at the old-age level. All the psychopathological groups showed greater IQ discrepancies in favor of vocabulary scores than did the non-psychotic group, but little difference was noted between the several diagnostic groups, and the magnitude of the discrepancy was not clearly related to the severity of the type of mental condition.—*E. B. Mallory* (Wellesley).

422. Radzinski, J. M. Constitutional vs. accidental factors in mental disease. *Illinois med. J.*, 1943, 84, 125-131.—Evidence is adduced that heredity and constitution are by far the most important predisposing factors in functional psychic disorders. An anatomical basis for these is postulated as a diencephalocortico-autonomic dysrhythmia, resulting in a poorly developed emotional equipment, a deficient emotional resistance. Physical immaturity (asthenic leptosome) is the somatic counterpart of emotional immaturity. Cure of a neurosis is impossible. The most that can be attained is a temporary removal or alleviation of symptoms by a suggestive substitutive method, and perhaps prevention by mental hygiene. Deep analysis is useless except for research purposes. The term "functional" should be eliminated from psychiatric nomenclature and replaced by "constitutional."—*M. E. Morse* (Baltimore, Md.).

423. Reynell, W. R. A psychometric method of determining intellectual loss following head injury. *J. ment. Sci.*, 1944, 90, 710-719.—The most significant indication of cerebral damage is the presence of intellectual loss. Six tests of the Wechsler-Bellevue Scale were routinely used on 520 consecutive cases of head injury; 120 gave a difference of 10 IQ points between tests holding up and those not holding up; 100 cases were found to be too dull and backward to make differential testing significant. Characteristic of head injuries is a deterioration in the relational thinking of the Similarities Test, in arithmetical reasoning, and in digit retention—especially the digits reversed.—*W. L. Wilkins* (U. S. Naval Reserve).

424. Richards, T. W. Psychologist in the Naval hospital. *Psychol. Bull.*, 1944, 41, 565-567.—The writer describes the work of a Naval clinical psychologist in terms of his experiences at the USNH, Mare Island, California.—*S. Ross* (U. S. Naval Reserve).

425. Rosenberg, R. Heredity in the functional psychoses. *Amer. J. Psychiat.*, 1944, 101, 157-165.—The author reviews four methods for studying heredity as a possible etiology in the functional psychoses, stating that the first three are either fallacious or irrelevant and that the fourth (twin method) strongly indicates that heredity plays no part in the psychoses.—*J. E. Zerga* (Walt Disney Productions).

426. Schwab, R. S. The duty problem and the psychiatric casualty; a rapid method of decision. *War Med.*, Chicago, 1944, 6, 144-150.—Schwab has devised an evaluation graph to aid the prompt decision as to prognosis and disposal of psychiatric cases in combat areas, where prolonged study and treatment are impracticable. Essentially it consists of a square bisected by a diagonal line. On the sides of the square are plotted respectively: stress experienced, *A*; severity of breakdown, *B*; evidences of previous instability, *C*; and degree of early recovery, *D*. Numerical values are assigned to these data, and *AB* and *CD* are plotted together, dividing the square into a favorable and an unfavorable triangle. A case falls into one or the other and borderline cases

lie near the diagonal. If $\frac{AB}{CD} = +1$, prompt and full recovery occurs; if -1 , the symptoms will continue for more than two months in spite of therapy. The graphs are illustrated and their use explained. Of the 100 cases studied for this report, in 82% the later results agreed clearly with the graph, and in 18% they were doubtful.—*M. E. Morse* (Baltimore, Md.).

427. Sears, R. R. Clinical psychology in the military services. *Psychol. Bull.*, 1944, 41, 502-509.—The work of clinical psychologists in the military services is described using three sources of information: published reports in technical journals, material on file in the OPP, and consultations with various agencies. The paper gives a brief survey of clinical psychological work in the U. S. Navy, Army Ground and Service Forces, and Army Air Forces. A bibliography of 49 items is presented covering the period from January, 1939, through June, 1944.—*S. Ross* (U. S. Naval Reserve).

428. Seidenfeld, M. A. Clinical psychology in Army hospitals. *Psychol. Bull.*, 1944, 41, 510-514.—A recently established program of clinical psychological service in all general hospitals and in the major station hospitals is analyzed under the following headings: scope of the program, qualifications of clinical psychologists, administration of the hospital program, and training of professional personnel.—*S. Ross* (U. S. Naval Reserve).

429. Sharp, A. A. The psychologist's contribution to occupational therapy. *Occup. Ther.*, 1944, 23, 234-237.—There are three aspects to an occupational therapy program in which psychologists may be of value: the understanding of human emotions, urges, drives, and needs; the measuring of individual differences; and the assisting in an evaluation of the program.—*J. E. Zerga* (Walt Disney Productions).

430. Sokolowsky, R. R., & Junkermann, E. B. War aphonia. *J. Speech Disorders*, 1944, 9, 193-208.—An account is presented of 116 cases of psychogenic aphonia from the last war. Most of the patients reported as precipitating factor a cold, sore throat, or laryngitis. The therapy finally found to be most successful involved strong suggestion (confident prediction of cure), manipulation of the larynx to cause some unpleasantness and an automatic vocal retching reaction, and immediate exploitation of this successful vocalization. It would appear that best results may be obtained in a single sitting and in field stations, rather than in base hospitals,

for immediacy of treatment is a prime factor in the prognosis. 28-item bibliography.—*F. W. Finger* (Virginia).

431. Solomon, H. C., & Yakovlev, P. I. [Eds.] *The manual of military neuropsychiatry*. Philadelphia: Saunders, 1944. Pp. xi + 764. \$6.00.—This manual, written in collaboration with 11 other physicians, is intended as a reference text on clinical neurology and psychiatry, especially for use by medical officers serving in areas where academic and professional services are limited.—*M. R. Jones* (U. S. Naval Reserve).

432. Staff, Classification Section, Classification and Replacement Branch, AGO. An Army experiment in retraining psychoneurotic casualties. *Psychol. Bull.*, 1944, 41, 519-523.—An experiment to determine the feasibility of retraining recovered psychoneurotics in order to utilize the services of personnel so classified is reported. The experimental training program returned to specific military duties a majority of the men who entered the program. However, the final determination of the effectiveness of the experimental program must await the judgments of the performance of the individuals in their new organizations.—*S. Ross* (U. S. Naval Reserve).

433. Stengel, E. Loss of spatial orientation, constructional apraxia and Gerstmann's syndrome. *J. ment. Sci.*, 1944, 90, 753-760.—Constructional apraxia and Gerstmann's syndrome are derived from the same basic disorder which underlies the loss of spatial orientation, i.e., the inability of the patient to relate in space objects, which form parts of an organized whole, to each other and to himself according to rules acquired by experience. The complex spatial organization of the outer world is replaced by a more primitive one, for which, in the case described, the only measure was nearness.—*W. L. Wilkins* (U. S. Naval Reserve).

434. Strother, C. R., & Kriegman, L. S. Rhythmokinesis in stutterers and non-stutterers. *J. Speech Disorders*, 1944, 9, 239-244.—"Fifteen stutterers were matched with fifteen non-stuttering controls with respect to age, sex, laterality and rhythm discrimination. These two groups were compared as to the ability to reproduce a given rhythm pattern with movements of the jaws, lips, tongue and forefinger. While the stutterers were consistently slightly superior to the non-stutterers, none of the obtained differences was found to be statistically significant." Thus no evidence was obtained of arrhythmokinesis among the stutterers, contrary to the results of certain other investigations.—*F. W. Finger* (Virginia).

435. Tenorio Nieto, A. Un caso de homosexualismo congénito. (A case of congenital homosexuality.) *Rev. Med. leg. Colombia*, 1943, 6, 57-68.—Congenital ("true") homosexuality is a fundamental deviation in which there are no marked somatic correlates of the psychological orientation. The condition is thus viewed in a different light from other modes of homosexual adjustment. Existing theories are reviewed in connection with a case study.—*H. D. Spoerl* (Jeffersonville, Vt.).

436. Thorne, F. C. A critique of nondirective methods of psychotherapy. *J. abnorm. soc. Psychol.*,

1944, 39, 459-470.—Demonstration of the value of nondirective methods is one of the major contributions of clinical psychology. But these methods do not fill all of the needs of treatment of even the mild personality disorders. Directive methods are a valuable supplement in getting case histories, discovering basic maladjustments, and providing the shock treatment sometimes essential to a lasting cure. Clinicians should not rigidly limit themselves to one technique.—C. M. Harsh (Nebraska).

437. Wilson, M. T. Contributions of the psychology department in a state hospital. *Occup. Ther.*, 1944, 23, 192-197.—This is a discussion of the function of a psychology department in a state hospital and the use of the Stanford-Binet intelligence scale, Babcock examination for the measurement of mental efficiency, and the Rorschach cards in diagnosing, treating, and planning for patients.—J. E. Zerga (Walt Disney Productions).

438. Zelig, M. A. War neuroses; psychiatric experiences and management on a Pacific island. *War Med.*, Chicago, 1944, 6, 166-172.—Zelig had a unique opportunity to observe the development of a group neurosis among previously stable persons, i.e., a combat unit which for more than a year functioned as an advanced garrison on an atoll. This type of warfare will increase, and it presents special problems. Stress was continuous but not extreme. Physical fatigue was an outstanding factor. A pool of nascent anxiety developed, which gradually progressed from psychosomatic disturbances to acute neuroses. Less than 10% of the patients improved when retained in the combat area, but evacuation was necessarily slow. In general older, family men are best rehabilitated by a short stay in the United States, while younger soldiers, whose anxiety derives from emotional immaturity and separation from parents, are better rehabilitated away from home. In isolated tropical bases, shorter periods of duty and rotation among stations in the same area are indicated.—M. E. Morse (Baltimore, Md.).

[See also abstracts 315, 320, 333, 372, 443, 448, 456, 490, 502, 508, 513, 515, 518, 534, 554, 569, 579.]

PERSONALITY AND CHARACTER

439. Bain, R. Man is the measure: writing, neurotic and normal. *Sociometry*, 1944, 7, 332-337.—The author analyzes his own motives for writing letters, scientific treatises, or any other form of literature, and speculates on the motives of other writers. He comes to the conclusion that much writing is done purely on a neurotic, sometimes even psychotic, basis.—S. B. Williams (U. S. Naval Reserve).

440. Bijou, S. W., & McCandless, B. R. An approach to a more comprehensive analysis of mentally retarded pre-delinquent boys. *J. genet. Psychol.*, 1944, 65, 147-160.—The psychometric patterns, obtained from the Terman-Merrill vocabulary, revised Stanford-Binet, and the Grace Arthur Performance Scale, for all boys ($N = 454$) resident at the Wayne County Training School, showed considerable heterogeneity when analyzed. Patterns of lowered functional intelligence, high behavior effi-

ciency, and high learning interference were found in 60%. The proportion of boys showing this pattern in each of 4 relatively adjustment-homogenous cottage groups was positively and significantly related to the adjustment level represented by the cottage. This particular psychometric pattern gives evidence of being of prognostic value in predicting adequate adjustment.—R. B. Ammons (Iowa).

441. Brogden, H. E. A multiple-factor analysis of the character trait intercorrelations published by Sister Mary McDonough. *J. educ. Psychol.*, 1944, 35, 397-410.—The author applied factorial analysis to intercorrelations between character trait ratings reported by Sister Mary McDonough in *The Empirical Investigation of Character* (see 3: 3139). Four factors were found. The first, demonstrating desirable classroom attitudes, correlated .766 with the second, withdrawing personality. Factor III involves factors indicating or seeming to indicate high intelligence and independence. Factor IV involved lack of sociability, lack of contentment, lack of humor, etc. "It appears to the author that recognition of necessary impurity of [character] variables and redirection of the search toward the finding of narrow group factors . . . has considerable promise."—E. B. Mallory (Wellesley).

442. Burgess, E. W., & Wallin, P. Homogamy in personality characteristics. *J. abnorm. soc. Psychol.*, 1944, 39, 475-481.—One thousand engaged couples in the Chicago area were questioned on 42 items of the Thurstone Inventory; 316 couples also gave self-ratings on 23 traits. There was a slight but consistent trend to more than chance similarity between engaged persons. The influence of social and religious groupings is suggested by the fact that there is more similarity of cultural traits than of personality and temperament.—C. M. Harsh (Nebraska).

443. Eliasberg, W. Graphology and medicine. *J. nerv. ment. Dis.*, 1944, 100, 381-401.—The history of graphology is reviewed briefly. The study of handwriting as an expression of the total personality would be advanced by comparing different developmental stages and by comparing the premorbid, morbid, and postmorbid handwritings of the same subject. Medicine may use graphology, eventually, to aid in making diagnoses, to estimate the change in the patient's condition under varying treatments, to reflect the degree of adjustment of the patient to his illness, to study deterioration, to estimate the degree of self-destructiveness and of physical well-being and, hence, the life expectancy of the patient, etc.—L. B. Heathers (Smith).

444. Eysenck, H. J., & Gilmour, J. S. L. The psychology of philosophers: a factorial study. *Character & Pers.*, 1944, 12, 290-298.—A factor dividing idealists from materialists accounted for 51% of the variance. Another separating the monists from the dualists accounted for 13%. There were no differences between idealists and materialists as to introversion, shyness, emotionality, nervousness, general drive, or depression.—M. O. Wilson (Oklahoma).

445. Guilford, J. P., & Martin, H. Age differences and sex differences in some introverted and emotional traits. *J. gen. Psychol.*, 1944, 31, 219-229.

—Inventory factors *STDCR* were studied for 800 high school boys and girls and 200 rural men and women. The greater emotionality of the female is apparent in the figures. Among men, the higher the intellect, the more tendency there is toward depression. Self-ratings and ratings by associates show that the scores for *S*, *D*, and *R* in particular are quite valid (r 's around .60).—G. W. Hartmann (State College, Pa.).

446. Hanawalt, N. G., & Richardson, H. M. Leadership as related to the Bernreuter personality measures: IV. An item analysis of responses of adult leaders and non-leaders. *J. appl. Psychol.*, 1944, 28, 397-411.—Responses to the items of the Bernreuter Personality Inventory of 90 supervisors were compared with those of 88 non-supervisors, and responses of 57 office holders were compared with those of 70 non-office holders. "An item analysis by means of the Chi-Square Test was made to determine the items . . . which show a significant difference in responses. . . . There are twenty-three items in each comparison which show significant differences in response, nine of which are common to both lists." (See 17: 3954, 3968; 18: 3818.)—H. Hill (Indiana).

447. Kempfer, H. Simplifying the scoring technique of the Bernreuter Personality Inventory. *J. appl. Psychol.*, 1944, 28, 412-413.—In attempting five simplifications of the B.P.I. scoring technique, no new key was found sufficiently discriminative to replace the original for accurate work. "For quick grouping of cases, the loss in reliability is believed justified by the saving of more than 90 per cent in scoring time."—H. Hill (Indiana).

448. Kendig, I. V. Projective techniques as a psychological tool in diagnosis. *J. clin. Psychopath. Psychother.*, 1944, 6, 101-110.—The Thematic Apperception Test and the Rorschach are judged to be the most significant projective techniques in uncovering leads for diagnosis, prognosis, and therapy in a relatively short time.—P. S. de Q. Cabot (United Drug, Inc.).

449. Leão Bruno, A. M. O movimento Rorschach no Brasil. (The Rorschach movement in Brazil.) *An. paul. Med. Cir.*, 1944, 47, 377-401.—The author describes the introduction of Rorschach psychodiagnostic methods into Brazilian practice and the establishment of an experimental institute to apply these methods. Some of the more important research reports issued are summarized.—A. C. Walton (Knox).

450. McClelland, D. C. Simplified scoring of the Bernreuter Personality Inventory. *J. appl. Psychol.*, 1944, 28, 414-419.—This simplified scoring technique consists of subtracting the total of all answers chosen by the subject which are weighted -3 or more by Bernreuter from the number weighted +3 or more, and merely gives such answers, which have a value of less than 3, a score of +1 or -1. One half to three quarters of the answers usually scored are thus eliminated. Values obtained from the shortened method on 114 students were correlated with full-scale values for this group. Correlations for each trait were .95 or above except for B2S, which was .84. Time and labor involved in either hand or machine scoring are much reduced.—H. Hill (Indiana).

451. Sarason, S. B. Dreams and Thematic Apperception Test stories. *J. abnorm. soc. Psychol.*, 1944, 39, 486-492.—As another validation of the Morgan and Murray thematic picture technique, the thematic stories were compared with the dreams of 25 mentally defective women from 17 to 50 years of age. The three cases cited as examples reveal aggression, ambivalence toward mother, guilt feelings, desire for affection and recognition, and preoccupation with religion. In most cases similar theme appeared in dreams and in thematic stories.—C. M. Harsh (Nebraska).

452. Wells, F. L. A research focused upon the normal personality: a note. *Character & Pers.*, 1944, 12, 299-301.—This is a brief report of a research unit carried on at Harvard since 1938 for investigating the personality of the normal young adult.—M. O. Wilson (Oklahoma).

453. Winthrop, H. The fundamental problems of biotypology. *J. gen. Psychol.*, 1944, 31, 151-177.—Sheldon's volumes have placed constitutional psychology on a new footing. His approach involves components ordered as intensive magnitudes, not measured in fundamental units. It is important to recognize the logical and mathematical consequences of a typology whose components are extensive magnitudes with basic cardinal units. The widespread belief that typologies neglect the concept of continuous gradation is false. So far as statistical relations go, the chief problem in biotaxonomy is the nature of the ties between the system of type indicators and the system of functionally dependent behavioral and organic characteristics of individuals. It is not generally recognized that the choice of an optimum point scale to prevent duplication of any theoretically or empirically distinct type is a complex mathematical operation, usually rich in contradictory assumptions. Actually, a typology resting on anthroposcopic methods is essentially a labor-saving device, since the predictive value of the multiple linear regression equation is greater than that of individual somatotypes. Under different conditions of diet, climate, etc., an experimental control in this field is possible if an analysis of variance is repeated for each behavior variable predicted by the typological system.—G. W. Hartmann (State College, Pa.).

[See also abstracts 384, 403, 412, 413, 482, 512, 548, 561, 584, 593.]

GENERAL SOCIAL PROCESSES

(incl. Aesthetics)

454. Allport, G. W. The bigot in our midst; an analysis of his psychology. *Commonweal*, 1944, 40, 582-586.—A bigot is "a person who, under the tyranny of his own frustrations, tabloid thinking and projection, blames a whole group of people for faults of which they are partially or wholly innocent." At present, due to frustrations incident to war, bigotry is widespread: 85% of our population appears ready to scapegoat some group, e.g., Jews, labor, international bankers. The regimentation and unquestioning obedience required of 10 million service men may increase still further this tendency in the

postwar period. The principal hope is that our Christian-democratic-scientific ethos will prevent prejudiced attitudes from carrying over into action and will check the spread of the bigoted attitude.—*F. W. Finger* (Virginia).

455. Alper, T. G., & Boring, E. G. Intelligence test scores of Northern and Southern white and Negro recruits in 1918. *J. abnorm. soc. Psychol.*, 1944, 39, 471-474.—Klineberg (see 9: 4717) and recently Benedict and Weltfish (see 18: 787) selected extreme states to show that intelligence test scores are more a function of geography than of skin color. The complete picture is presented in this note, with an analysis of variance of the Army Alpha and Beta tests in all states in 1919. Inclusion of the Beta results helps the whites more than the Negroes. The complete results show test scores to be significantly related both to skin color and to locale.—*C. M. Harsh* (Nebraska).

456. Atkin, I. The family, neurosis and criminosis. *J. clin. Psychopath. Psychother.*, 1944, 6, 89-99.—The determinants of neurosis and criminosis are found in unhealthy family situations, largely as a result of various frustrations inherent in the social structure. Prophylactic measures to remove these frustrations include vocational placement according to ability, adequate wages and old-age compensation, equal professional opportunities for men and women, increased social and cultural facilities, suppression of business malpractices, and a reorientation of human values.—*P. S. de Q. Cabot* (United Drug, Inc.).

457. Bassett, R. E. Cliques in a student body of stable membership. *Sociometry*, 1944, 7, 290-302.—Sociometric data were secured from all but one of the students in a normal school just prior to the close of the 1943 academic year. A tendency was observed for each student to be associated with one of 13 cliques. Clique membership and relative popularity of cliques can be measured in terms of frequency of choice. There was some tendency (ρ , .92) for the popularity of a clique to vary directly with the popularity of its most popular member. There is a strong tendency for attraction to proceed in only one direction, that is, toward the most popular clique in the hierarchy.—*S. B. Williams* (U. S. Naval Reserve).

458. Bernard, L. L. *War and its causes*. New York: Holt, 1944. Pp. 489. \$4.25.

459. Bijou, S. W. Behavior efficiency as a determining factor in the social adjustment of mentally retarded young men. *J. genet. Psychol.*, 1944, 65, 133-145.—Comparison was made of the scores of a relatively homogeneous group of 136 mentally retarded male subjects on 7 subtests from the Pintner-Paterson Scale (speed-accuracy-relevancy, or SAR performance test), vocabulary test (the 1916 Stanford-Binet), full 1916 Stanford-Binet Scale, the Stanford Achievement Battery, and the full Pintner-Paterson Scale. All subjects were contacted by social workers 4-8 years after parole, and they were then rated on a 5-point scale of social adjustment. SAR performance quotients minus Terman vocabulary quotients gave an index of behavior efficiency. Going from the group showing

poorest to the group showing best social adjustment, this behavior-efficiency index becomes progressively larger, with relatively constant vocabulary quotients but increasingly larger SAR quotients. All other test scores, considered separately, were found to be unrelated to social adjustment.—*R. B. Ammons* (Iowa).

460. Brody, S. Science and social wisdom. *Sci. Mon.*, N. Y., 1944, 59, 203-214.—"A major social-homeostatic need [is] to bring together science . . . and religion and moral values in the sense of social wisdom," which is defined here as "behavioral reactions which promote social survival." Scientists, who are in a sense responsible for the disturbed evolutionary equilibrium between the effects of sociocentric and egocentric drives, should assume indirect social and religious leadership in this critical situation in promoting progress in creative religion.—*E. Girden* (Brooklyn).

461. Bronfenbrenner, U. The graphic presentation of sociometric data. *Sociometry*, 1944, 7, 283-289.—A rational method of graphing interpersonal relations within a group is presented, based on the principle of deviation from chance expectancy. It developed as a modification of Northway's quartile-target device, which is held less suitable than the new technique for the description of groups that vary in size and membership. The target rings of the new device are defined in statistical terms of level of significance, with "stars" in the center and "isolates" on the periphery.—*S. B. Williams* (U. S. Naval Reserve).

462. Collier, R. M. The effect of propaganda upon attitude following a critical examination of the propaganda itself. *J. soc. Psychol.*, 1944, 20, 3-17.—Two groups of students were tested in April and again in May of 1941 for their attitude toward the Nazis. The experimental group was, before the second test, instructed in principles and practices of the propagandist and also exposed (apparently as a part of the instruction) to considerable pro-German material. The control group neither received the instruction nor came in contact with the German propaganda. Comparison of the two tests in the control group shows a reliable shift toward the anti-Nazi side (interpreted as a reflection of the current popular shift). The experimental group on the other hand became somewhat more tolerant of the Nazis (CR of 2.38). This indicates that even those who are aware of the nature of propaganda devices may still be positively influenced by propaganda, and leads the writer to conclude that the protective power of such insight as these subjects possessed "has apparently been overrated in the past."—*F. W. Finger* (Virginia).

463. Copeland, L. C. Racial ideologies and the war. *Sociol. soc. Res.*, 1943, 27, 441-446.—The effects of the traditional white-caste ideology upon wartime Negro morale are discussed.—*S. S. Sargent* (Barnard).

464. Cox, O. C. The racial theories of Robert E. Park and Ruth Benedict. *J. Negro Educ.*, 1944, 13, 452-463.—Park's teleological approach to the problem of race relations has created a number of inconsistencies and contradictions in his position. His belief that contemporary race prejudice may be

traced to early forms of human association is considered fallacious. It is also disputed that race prejudice is caste prejudice; that race relations are determined by mores; and that cultural conflicts in ancient times were actually race conflicts. Although Ruth Benedict recognizes that "racial antagonism is a recent European development," she ignores the materialistic and economic basis for it. She also overemphasizes the theory of ethnocentrism as a cause of race prejudice.—A. Burton (Calif. State Personnel Bd.).

465. Cronbach, L. J., & Davis, B. M. Belief and desire in wartime. *J. abnorm. soc. Psychol.*, 1944, 39, 446-458.—Fifty statements about wartime living were judged as to probability and desirability by 61 college students in February, 1942. Ratings on belief and desire correlated only .41. Stereotypes were believed more than desired. Debatable statements had similar means on belief and desire. Contrary to McGregor's conclusion (see 12: 4900), statements most important to the students did not show correspondence of belief and desire. Realism is also involved. Correlations between belief and desire varied among students from .74 to -.27. The noticeably maladjusted students were all among the extreme optimists or pessimists. Group predictions were fairly accurate, and it is suggested that optimism may be a view of accepting what is likely to occur.—C. M. Harsh (Nebraska).

466. Dodd, S. C. On reliability in polling; a sociometric study of errors of polling in war zones. *Sociometry*, 1944, 7, 265-282.—Some methodological problems in polling are discussed from the point of view of the usefulness of public opinion polls to administrators of occupied territories. The few data presented are based on surveys conducted in Syria and Sicily. A novel use of the chi-square goodness-of-fit test in determining reliability was used in addition to the usual correlation coefficient and the proportion of discrepant responses between successive interviews. The degree of error due to each of the following factors was measured: informant, interviewer, schedule, communication medium, time and degree of acquaintance between interviewer and informant. Surprisingly, the acquaintance factor was much smaller than the others. In spite of these sources of error, the reliability of an individual's answers was fairly high (63% to 90%), and the reliability of the group (distribution of answers within the group sampled) was nearly perfect, i.e., estimated at 99%. In consequence of this high reliability, the polls are regarded as capable of furnishing accurate information for use by administrative authorities.—S. B. Williams (U. S. Naval Reserve).

467. Dunkel, H. B. An inventory of students' general goals in life. *Educ. psychol. Measmt.*, 1944, 4, 87-95.—An objective means of recording a student's statement of his general goals in life was developed. A list of 20 main goals was obtained from papers written by students and from teachers. Objectivity is obtained by having the subject rank the 20 goals by the method of paired comparison. An example is given of the way in which the inventory records the student's goals.—S. Wapner (Rochester).

468. Dunlap, K. The great Aryan myth. *Sci. Mon.*, N. Y., 1944, 59, 296-300.—E. Girden (Brooklyn).

469. Ericksen, S. C. A skeptical note on the use of attitudes scales toward war: II. In 1942. *J. soc. Psychol.*, 1944, 20, 31-38.—Samples of students of the University of Arkansas were given the Thurstone-Peterson Attitude Toward War scale in 1940, 1941, and 1942. Analysis of scoring patterns indicates some changes, but comparison of average gross scores reveals no appreciable shift in attitude, with all 3 means falling within the range "moderately opposed to war." Since other criteria suggest a decided shift in opinion, it is argued that "this type of scale does not give a meaningful picture of contemporary war attitudes."—F. W. Finger (Virginia).

470. Feibleman, J. Individual psychology and the ethics of Peirce. *J. gen. Psychol.*, 1944, 31, 293-295.—The purpose of the paper is to show the relation of Peirce's logical ethics to Adler's ethical psychology. Ethical conduct, according to Peirce, is loyalty to the "unlimited community" or the infinite and ideal whole. Adler also, who correctly understood psychology as the study of the comprehension of value, ignored as too limited the immediate group in which the individual finds himself immersed.—G. W. Hartmann (State College, Pa.).

471. Feldman, A. A. Freud's "Moses and Monotheism" and the three stages of Israelitish religion. *Psychoanal. Rev.*, 1944, 31, 361-418.—The development of the Jewish religion from its early Israelite form, through the Torah-Judaism of Ezra, and then into the Talmudic-Judaism of the Pharisees is reviewed in the light of analytic principles. Talmudic-Judaism flourished where Torah-Judaism failed because the former readmitted, in a new and less obvious form, the main features of the early Israelite beliefs, hence giving the people an outlet for their incestuous wishes.—L. B. Heathers (Smith).

472. Flügel, J. C. The moral paradox of peace and war. London: Watts, 1941. Pp. xi + 52. 2s.—War has so far been endemic among mankind because man's sense of moral obligation towards others has been limited to relatively small social groups; to others, outside his own group, he shows his primitive egotism and aggressiveness. Moreover, in spite of its horrors, war arouses a moral thrill which is based on (a) love of adventure, (b) feelings of increased unity and sympathy within the group, (c) increased sense of being needed, (d) submerging of personal ambition and personal moral responsibility in those of the group, and (e) increased outlet for aggressive and, to some extent, sexual impulses. If war is ever to be renounced, some other method of satisfying these tendencies must be found. Totalitarianism provided one solution but at the cost of a dangerous over-integration in the group, with corresponding curtailment of heterogeneity and of individual liberty of thought and action. Yet a greater integration in a common purpose is necessary; possibly our endless struggle against the forces of Nature might provide one.—M. D. Vernon (Cambridge).

473. Gorham, R. The folkways of Brazil; a bibliography. New York: New York Public Library, 1944. Pp. 67. \$1.25.

474. Harris, E. Public opinion polls. *Publ. Opin. Quart.*, 1944, 8, 435-457.—A topically arranged compilation is presented of poll results released by the American Institute of Public Opinion, the Canadian Institute of Public Opinion, the Australian Public Opinion Poll, the National Opinion Research Center, and the Office of Public Opinion Research, covering the period from June through August, 1944.—H. F. Rothe (Stevenson, Jordan & Harrison, Inc.).

475. Havighurst, R. J., & Hilkevitch, R. R. The intelligence of Indian children as measured by a performance scale. *J. abnorm. soc. Psychol.*, 1944, 39, 419-433.—A short form of the Arthur Point Scale was used to measure the intelligence of 670 American Indian children, ages 6 to 15, in 11 communities of Hopi, Navaho, Zuni, Zia, Papago, and Sioux. Average ability is about the same as that of white children, with large differences among communities. The Indian children do not work more slowly than whites on these tests. Thirty children previously tested with the Kuhlmann-Anderson averaged 20 points higher in IQ on the Arthur Scale. The performance test would seem the more valuable for educational placement of Southwestern Indian children.—C. M. Harsh (Nebraska).

476. Havighurst, R. J., & Janke, L. L. Relations between ability and social status in a midwestern community. I: Ten-year-old children. *J. educ. Psychol.*, 1944, 35, 357-368.—All the children of ten years of age, a total of 114, in a typical Middle Western community with a population of 10,000, were classified according to social status, following the procedures of W. L. Warner. 110 children took all of the following tests: Revised Stanford-Binet Form L, Cornell Cox Performance Ability Scale, the Iowa Silent Reading Test, the Minnesota Paper Form Board, either the Minnesota Mechanical Assembly or the Chicago Assembly Test for Girls, and the Porteus Maze Test. The Goodenough Draw-a-Man Test was given also to the urban children. High intercorrelations among these tests were found. Children of higher family social status tended to do better in all the tests than those of lower social status. Urban children did better than rural children except on the mechanical assembly test for boys. In spite of group differences, there was much overlapping of scores.—E. B. Mallory (Wellesley).

477. Jaynes, J. Toward a psychology of morale. *J. gen. Psychol.*, 1944, 31, 287-291.—In Mead's theory, the "generalized-other" unifies the self and becomes the ultimate censor over the individual's act, the frame through which he responds in social activity. A myth is "a cultural philosophy of life writ in subjective symbols—symbols which express the individual's personal yearnings, yet serve to unite a society into concerted action." Myth is a structural concept, a means of acting on the present; morale is a functional concept, the process by which the myth works. They are two aspects of the same thing. The objective end of morale comes to Plato's justice—the proper functioning of each part in a whole, where the individual finds his own moral cravings reflected in the underlying values of his society. A horizontal dimension for morale with individual and group action as poles is proposed.—G. W. Hartmann (State College, Pa.).

478. Kerr, W. A. Correlates of politico-economic liberalism-conservatism. *J. soc. Psychol.*, 1944, 20, 61-77.—This reviews numerous investigations correlating politico-economic liberalism with a wide variety of personal characteristics. In general, it appears that liberalism tends to be more closely associated with the following than is conservatism: more formal schooling, higher scholarship, and relevant information; higher intelligence; introversion and pessimism; and less favorable inclination toward religion. Adults under 40 tend to be more liberal than do those over 40; fraternity members are more likely to be conservative than are independents; and Republicans seem to be least liberal and Communists most liberal. 65 references.—F. W. Finger (Virginia).

479. Kierkegaard, S. The concept of dread. (Trans. by W. Lowrie.) Princeton, N. J.: Princeton University Press, 1944. Pp. xiii + 154. \$2.00.—With the publication of this book, the translation of Kierkegaard's more important works has at last been completed. On the original title page the present work is described as "A simple psychological deliberation oriented in the direction of the dogmatic problem of original sin." In spite of the Hegelian or anti-Hegelian terminology in which his thought is expressed and the concepts of dogmatic theology by which it is dominated, it would seem that this early nineteenth century thinker anticipated some of the insights of the psychoanalysts. His "dread" appears to be a conflict between one's present and one's future, between the actual and a vague presentiment of something better. Thus understood, it is the presupposition, but not the complete explanation, of original sin. On the other hand, "dread" also leads men to salvation, for by the aid of faith it is educative, "laying bare all finite aims and discovering their deceptions."—R. H. Dotterer (Pennsylvania State College).

480. Kleinschmidt, H. E. Evolution of the wheel. *Sci. Mon.*, N. Y., 1944, 59, 273-282.—E. Girden (Brooklyn).

481. Kluckhohn, C. Navaho witchcraft. *Pap. Peabody Mus.*, 1944, 22, No. 2, 33-72; 145-150.—Part I, Section 10, is a discussion of participation among the Navaho in belief in witchcraft. Part II is an interpretation of data divided into three sections. Section 1 explains the structural analysis to be made. Section 2 points out the geographical distribution of witchcraft concepts and suggests their tentative historical significance. Section 3 considers Navaho witchcraft as providing culturally defined adaptive and adjustive responses: socialization implements the perpetuation of witchcraft beliefs; and witchcraft has manifest and latent functions for the individual and for social groups. There follows a discussion of the following topics: sources of personal insecurity and intragroup tension; ways of handling hostile impulses; aggression release; relation to socialization; handling of the anxiety problem; and witchcraft as an adaptive structure for local groups and for Navaho society and as a technique for social control. A 4-page bibliography concludes the monograph.—E. Lidge (California).

482. Laird, D. A., & Laird, E. C. The technique of building personal leadership; proved ways for

increasing the powers of leadership. New York: Whittlesey House, McGraw-Hill, 1944. Pp. vii+239. \$2.00.—Topics discussed include the following: the personality of the leader, personal magnetism, poise, self-confidence, the effect of moods, optimism in relation to enthusiasm, tact, personal initiative, achievement methods, decisiveness, procrastination, and public speaking.—*N. H. Pronko* (Indiana).

483. Lassner, R. Sex and age determinants of theatre and movie interests. *J. gen. Psychol.*, 1944, 31, 241-271.—Miscellaneous data, originally gathered in Vienna in 1935-36 and centered about various differences between patrons of the legitimate stage and the films, are presented. Sex comparisons lead to the conclusion that women are chiefly responsible for the exaggerated star adoration of our times. Attendance at theatrical shows culminates in the ages 20-30; for movies it drops after 20 and markedly after 40.—*G. W. Hartmann* (State College, Pa.).

484. Link, H. C. The tenth nation-wide social experimental survey. *J. appl. Psychol.*, 1944, 28, 363-375.—Interviewing procedures and techniques used by the Psychological Corporation in their tenth social survey are described. Five thousand interviews were conducted by 412 interviewers and 121 local supervising psychologists. Trends in public opinion and some evaluation of the findings are included under sample questions and tabulation of answers. Among the general topics discussed are race and class prejudice, wages and cost of living, free enterprise vs. government control, 1944 election results, and postwar pessimism.—*H. Hill* (Indiana).

485. Lundin, R. W. A preliminary report on some new tests of musical ability. *J. appl. Psychol.*, 1944, 28, 393-396.—Five tests are described which purport to measure abilities commonly taught in music theory courses. The tests cover interval discrimination, melodic and harmonic transposition, and melodic and harmonic sequences. A statistical analysis is included. The author believes that the tests measure various traits which, in part, constitute the musical personality.—*H. Hill* (Indiana).

486. McGehee, F. An experimental study of voice recognition. *J. gen. Psychol.*, 1944, 31, 53-65.—This is an extension of an earlier study in which it was shown that auditors listening to a reader behind a screen could identify that voice among 4 others with 83% accuracy after 2 days to 13% after 5 months (see 12: 1553). Instead of actual voices, radio-reproduced voices of unknown men were employed reading the same selection. College women served as judges. Recognition dropped from 85% accuracy after 2 days to 45% after 2 months; in general, the difference between actual and recorded voices was about 7%, as reported also by other investigators. Disagreeable voices evoked greater agreement than agreeable ones. A tendency existed to overestimate the age, height, and weight of a speaker whose voice appeared lowest in pitch and slowest in rate. Voices judged most agreeable after one repetition are not the most preferred after many repetitions.—*G. W. Hartmann* (State College, Pa.).

487. McIntosh, E. A. A preliminary investigation into the occupational significance of the contrast

response to a free-association test. *J. gen. Psychol.*, 1944, 31, 119-124.—A hundred common words produced group differences in medians and *r*'s indicating that "influencing-other-people" workers have a decided tendency to give more contrasts to free-association test stimuli than do lone workers. It is suggested that this may represent a mental set to consider opposing points of view (in teachers and salesmen) as distinct from an egocentric orientation.—*G. W. Hartmann* (State College, Pa.).

488. McWilliams, C. Prejudice; Japanese-Americans: symbol of racial intolerance. Boston: Little, Brown, 1944. Pp. 337. \$3.00.—A documented case study of racial intolerance in America is offered covering the story of the Japanese Relocation Centers and the race prejudice which influenced the formation of the centers.—(Courtesy *Publishers' Weekly*).

489. Orr, J. On some sound values in English. *Brit. J. Psychol.*, 1944, 35, 1-8.—It seems reasonable to suppose that in the early stages of language development, the speech sounds, with their variations of quality, tone, and stress, must have had some concrete intrinsic value before becoming mere tokens for the exchange of ideas. It may be conjectured that language progressed from the representational to the symbolic and that the first sound groups, whether naming words or words with sentence value, were stimuli and accompaniments of action, demonstrative signals rather than purely conventional signs. There are some evidences of this primary representational character in present-day language, in particular in the use of vowel antiphony, i.e., of a front and back vowel used in conjunction or in opposition. The shorter, less resonant, more acute front vowels (e.g., the short *i* in 'little') seems to make them a suitable expression of smallness, as contrasted with the broader more resonant back vowels (e.g., the broad *a* in 'large'). The front-back antiphony of 'tittle-tattle,' for example, gives a feeling of satisfaction, due possibly to the release of tension and also to the mere contrast of volume or resonance. A number of other antiphonies of this kind are also discussed.—*M. D. Vernon* (Cambridge).

490. Peberdy, G. R. Resort to phantasy in individuals and societies. *J. ment. Sci.*, 1944, 90, 739-745.—Described are individual cases of resort to phantasy in unendurable circumstances, group attitudes in frustration, and the history of some epidemic psychic afflictions. The possibility of war and postwar group abnormal practices is discussed.—*W. L. Wilkins* (U. S. Naval Reserve).

491. Schmeidler, G. R., & Allport, G. W. Social psychology and the civilian war effort: May 1943-May 1944. *J. soc. Psychol.*, 1944, 20, 145-180.—The recently published efforts of civilian social psychologists in relation to the war are reviewed under the following headings: morale and its measurement, civilian intelligence work, minorities, rumor, morale-building, media of communication, propaganda and demagoguery, comparative national psychology, industrial morale, essentials for normal living, demoralization and its control, and planning for the postwar period. "In general, the fact-finding or 'intelligence' functions of social psychology are far better developed than its applications. . . . The coordination between social investigation and social

action is distinctly unsatisfactory." 187-item bibliography.—F. W. Finger (Virginia).

492. Schmid, R. C. German youth movement; a typological study. *Summ. doct. Diss. Univ. Wis.*, 1942, 7, 167-169.

493. Smith, M. Imitation and suggestion re-examined. *J. gen. Psychol.*, 1944, 31, 111-117.—Inference and response to suggestion are actually more important in the social world than is imitation. It even seems likely that inference precedes imitation as a form of social response among children.—G. W. Hartmann (State College, Pa.).

494. Smith, M. Some factors in friendship selections of high school students. *Sociometry*, 1944, 7, 303-310.—A sociometric study of 103 high school seniors in a Midwestern town included an analysis of factors influencing choice of friends. Factors studied included sex, residence, athletic and non-athletic activities, grades in a high school history course, church preference, father's credit rating and occupational status, and parents' community activities. The author concludes that people select friends who are in some ways like themselves and that consequently friendship selection may be merely a form of ego-expansion.—S. B. Williams (U. S. Naval Reserve).

495. Stagner, R. Studies of aggressive social attitudes: I. Measurement and interrelation of selected attitudes. *J. soc. Psychol.*, 1944, 20, 109-120.—Attitude inventories regarding force, nationalism, war as a national policy, fascism, capital punishment, and racial tolerance were administered to a group of college students. Reliability and validity seemed to be fairly satisfactory. Intercorrelations of the scales reveal a positive relationship among the various aggressive attitudes.—F. W. Finger (Virginia).

496. Stagner, R. Studies of aggressive social attitudes: II. Changes from peace to war. *J. soc. Psychol.*, 1944, 20, 121-128.—"When students were retested on an inventory of social attitudes [see 19: 495] after the outbreak of war, their war-attitude scores showed practically no relation to scores made during peace time. This suggests that a totally new frame of reference is now determining judgments on this attitude-continuum. The same conclusion appears justified with reference to a scale for attitude toward use of force." Scales of attitudes toward nationalism, authority, fascism, and capital punishment, however, revealed a decline in reliability small enough to be attributed to chance factors alone.—F. W. Finger (Virginia).

497. Stagner, R. Studies of aggressive social attitudes: III. The rôle of personal and family scores. *J. soc. Psychol.*, 1944, 20, 129-140.—"1. A group of active radicals had reliably less satisfactory relationships with parents and lower personal morale (self-satisfaction) than a control group. 2. Within college male populations, there was a consistent tendency, sometimes statistically reliable, for men with good family morale to be more conservative, more nationalistic, and more aggressive. 3. In general, men reporting more antagonism to parents were relatively liberal and international, but also aggressive, as compared to those reporting

less parent-antagonism. . . . The data of this and preceding papers can be harmonized with a displacement theory of social aggression if a distinction is made between irradiation of aggression to stimuli perceived as identical (here called transfer) and draining off of aggression from a situation consciously perceived as favorable, deflecting it to another which is perceived in an unfriendly light (here called displacement)."—F. W. Finger (Virginia).

498. Stetzel, J. *Théorie des opinions*. (The theory of opinions.) Paris: Presses Universitaires de France, 1943. Pp. 455. Frs. 100.—Opinion is defined in this treatise as one of the possible answers to a specific question to which a subject adheres without reservations. An individual's specific opinions spring from more general underlying attitudes, and attitudes as well as opinions can be measured through objective scales. The five parts of the book deal with: definition and measurement of opinions; distribution of opinions, private and public opinions; opinion and thought, temperament, action; the individual and his opinions; and the significance of opinions for the psychologist, the sociologist, the historian, the politician, the moralist and the educator. "Opinion is one of the functions through which the chaos of thoughts becomes organized, in individuals and societies." There are approximately 300 references.—H. L. Ansbacher (Office of War Information).

499. Toeman, Z. Role analysis and audience structure, with special emphasis on problems of military adjustment. *Psychodrama Monogr.*, 1944, No. 12. Pp. 19.—See 18: 3826.

500. Von Neumann, J., & Morgenstern, O. *Theory of games and economic behavior*. Princeton: Princeton University Press, 1944. Pp. xviii + 625. \$10.—The authors analyze some fundamental questions of economic theory in terms of a mathematical theory of games. The common elements of economic behavior and such factors as strategy in games are presented, and the interrelated concepts are analyzed around the more or less central problem of utility. The book is divided into 12 chapters, the first being a formulation of the economic problem, presenting the objectives of the system used, the notion of utility, and a description of the structure of the authors' theory. The second chapter is a general formal description of games of strategy, and chapters 3-8 treat particular classifications of games. In chapter 9, the authors discuss the composition and decomposition of games. Chapter 10 is on simple games, and chapter 11 on general non-zero-sum games. (These are games in which the sum of all payments received by all players is not zero. Thus such games involve production or destruction of goods and are more closely analogous to general social and economic situations than zero-sum games.) The concluding chapter presents a generalization of the concept of utility and the discussion of an example.—T. G. Andrews (Chicago).

501. Wallace, J. M., Jr., Williams, F. W., & Cantril, H. Identification of occupational groups with economic and social class. *J. abnorm. soc. Psychol.*, 1944, 39, 482-485.—Over 3,000 interviews

were classified into 8 classes by income and occupation. Tables are presented analyzing the social and economic identifications of persons in June, 1941. A majority of Americans of all occupational classes identify themselves with the middle social class, even while admitting a lower or higher income status. Discrepancy between social and income identification is less for persons possessing a car or a telephone.—*C. M. Harsh* (Nebraska).

502. Waller, W. *The veteran comes back*. New York: Dryden, 1944. Pp. xiii + 316. \$2.75.—This is a comprehensive study of veteran adjustment, past and present, written by a sociologist and veteran of World War I. Part I details the psychological changes occurring as the civilian is made into a professional soldier. Part II describes factors which interfere with the veteran's adjustment as he comes back to an alien homeland. Part III discusses past attempts and failures to help the veteran, and Part IV gives the essentials of a constructive immediate program. A short epilogue is entitled "Rehabilitation—a new social art to be learned."—*S. S. Sargent* (Barnard).

503. West, R. *Conscience and society; a study of the psychological prerequisites of law and order*. London: Methuen, 1942. Pp. 260. 15s.—The central theme is the theory that man requires the support given by the enforcement of the law for controlling the evildoer in his own unconscious mind, although he may rationalize it as the control of the evildoer in others. Since no one can be an impartial judge in his own case, a series of external rules and regulations is necessary. This is now recognized in the relations between individuals, but it has not yet been accepted as between nation states. For the future peace of the world, these states must make a voluntary abnegation of their sovereignty, but in doing so they must set up a judicial body with supernatural powers which shall determine and enforce international law. Hitherto that law has been merely a series of promises, broken whenever convenient. Unless the nation states know that this law can and will be enforced against them, each one will continue to project the origin of any breakage upon some other. The theories of government of Hobbes, Locke, Rousseau, and other philosophers and jurists are discussed and related to what is known of the nature of the unconscious mind, the Freudian theory being criticized and modified along the lines suggested by Suttie; two main instinctive tendencies, the self-assertive and the social, are postulated. The conflict between these is illustrated by the study of the case histories of obsessionals. Except in the case of the obsessional (who may have far too much influence on the course of international relationships), the social instinctive tendency is the stronger in the long run; but it must be reinforced by the external sanctions of the law, and laws are created and enforced for that purpose.—*M. D. Vernon* (Cambridge).

504. Winslow, C. N. *The social behavior of cats. I. Competitive and aggressive behavior in an experimental runway situation*. *J. comp. Psychol.*, 1944, 37, 297-313.—"The effect of competition upon social behavior was studied in 14 cats, 9 males and 5 females, by placing them in a competitive runway

21 feet in length in which only the winner, except in case of ties, obtained the reward of food in the goal compartment. The experiment consisted of two parts, one in which the cats were paired as competitors, and another in which they were tested in groups of three." Results indicated that the presence of competition slowed the running speed. There were variations in running speed of a given cat with various competitors. When there were three animals in the situation, aggression was often directed by one loser against the other, a form of displaced aggression.—*L. I. O'Kelly* (U. S. Army).

505. Winslow, C. N. *The social behavior of cats. II. Competitive, aggressive, and food-sharing behavior when both competitors have access to the goal*. *J. comp. Psychol.*, 1944, 37, 315-326.—"In this experiment 11 cats, 7 males and 4 females, were tested in a competitive situation in which two opponents, winner and loser, faced each other at the goal. Two identical problem boxes of the lever-pressing type were placed front to front two feet apart with a single piece of food in the center of the space between them. The winner, i.e., the cat that pressed the lever first to release itself from the box, reached the food first. The loser, however, if it released itself from the other problem box soon enough, could reach the food before the winner had devoured all of it." The competitive situation brought forth more rapid manipulation of the problem box. Three patterns of social interaction were evident: (1) struggling for the food by both winner and loser, (2) hoarding of food by winner or by loser, and (3) sharing of food with no aggression by either party. (See also 19: 504.)—*L. I. O'Kelly* (U. S. Army).

506. Wood, A. L. *Social organization and crime; a study of small communities in Wisconsin*. *Summ. doct. Diss. Univ. Wis.*, 1942, 6, 185-187.

507. Woodward, J. W. *The role of fictions in cultural organization*. *Trans. N. Y. Acad. Sci.*, 1944, 6, 311-344.—A number of cultural situations are analyzed in terms of the fictions (things that are not objectively true but must be believed to maintain social integration) that govern them.—*F. W. Finger* (Virginia).

508. Yost, E., & Gilbreth, L. M. *Normal lives for the disabled*. New York: Macmillan, 1944. Pp. x + 298. \$2.50.—This book, intended primarily for those physically disabled, contains advice on the need for the person disabled to face squarely his own fears (or inadequacy, etc.), on how to go about making normal social adjustments, and how to prepare for and obtain a useful job. State and federal rehabilitation agencies are listed, along with addresses of other agencies which can aid in vocational guidance.—*S. B. Williams* (U. S. Naval Reserve).

[See also abstracts 381, 400, 401, 442, 446, 509, 537, 538, 539, 541, 551, 557, 562, 573, 582, 583, 589, 590.]

CRIME AND DELINQUENCY

509. Betke, M. A. *Defective moral reasoning in delinquency; a psychological study*. *Stud. Psychol. Psychiat. Cathol. Univ. Amer.*, 1944, 6, No. 4. Pp. x + 95.—A moral reasoning test (reproduced in

the monograph) was administered to 50 delinquent boys and 50 controls between ages 11 and 16. Non-delinquents gave 183 more correct responses than delinquents (statistically significant). Scoring was on the basis of 3 categories of response: emotional, pragmatic, and ethical, only the latter being counted completely correct. It is contended that delinquency is related to defective moral reasoning. Test situations are stated in syllogistic form.—*H. D. Spoerl* (Jeffersonville, Vt.).

510. Burt, C. Delinquency in peace and war. *Hlth Educ.*, 1943, 1, 165-172.—It has been found that during the war there has been an increase in juvenile delinquency of 60% among boys and 20% among girls; the greatest increase has been below the age of 14 for boys and above 14 for girls. The dull and backward are affected even more than normal children. Recidivism has also increased considerably. These increases are attributed to the following factors: the break-up of the home through evacuation, absence of fathers on service, etc.; shelter life, the darkness of the black-out, and decreased opportunities for normal schooling and normal recreation; and in some cases, unduly high wages. It is also possible that the child's natural assertiveness and adventurousness are increased through the increased emphasis on violence and destructiveness and the lack of self-restraint, which occur in wartime.—*M. D. Vernon* (Cambridge).

511. Germain, W. M. This is it! *Police J.*, N. Y., 1944, 30, No. 1, 3-4; 17.—If the circle of juvenile delinquent to delinquent parent to juvenile delinquent is to be broken, new techniques must be used to help both child and adult to acquire well-integrated personalities. The author briefly describes some of the techniques which he has used successfully.—*G. S. Speer* (Central YMCA College).

512. Uribe Cualla, G. Importancia del estudio de la personalidad del delincuente. (Importance of studying the delinquent's personality.) *Rev. Med. leg. Colombia*, 1942, 5, 3-28.—Whether a Lombrosian or anti-Lombrosian view of criminality is taken, the personality of the delinquent must be considered in the interests of legal procedure. An eclectic approach rather than a monosymptomatic theory is desirable. Essential considerations are to be derived from endocrinological and biotypological investigation and from testing. These contentions are discussed in the light of the revised Colombian penal code.—*H. D. Spoerl* (Jeffersonville, Vt.).

513. Vold, G. B. Un ensayo sociológico sobre el problema de la deficiencia mental como factor en la clasificación de los delincuentes. (Sociological approach to the problem of mental deficiency as a factor in classifying delinquents.) *Criminalia*, 1944, 10, 734-740.—See 16: 4959.

[See also abstracts 398, 417, 456, 506.]

INDUSTRIAL AND PERSONNEL PROBLEMS

514. Adkins, D. C. Test construction in public personnel administration. *Educ. psychol. Measmt.*, 1944, 4, 141-160.—Aspects of selection of civil service personnel are discussed with special emphasis on the construction of written objective examina-

tions. The following phases of test construction are treated: test content, speed versus power, length, type of item, repeated use of item, statistical analysis of items, establishment of critical scores, compiling related examinations, order of items for related examinations, and selection and training of subject-matter consultants.—*S. Wapner* (Rochester).

515. Bobbitt, J. M., & Newman, S. H. Psychological activities at the United States Coast Guard Academy. *Psychol. Bull.*, 1944, 41, 568-579.—The combined medical and psychological program at the U. S. Coast Guard Academy is discussed in reference to the functions of the psychologist. The program is analyzed under the following headings: development, relation of psychologist to Academy organization, duties of psychologists, and predictive value of psychological measures. The duties of the psychologists stationed at the Academy include test administration; interviewing; research and test construction; counseling, psychotherapy, and individual testing; and fulfilling special assignments.—*S. Ross* (U. S. Naval Reserve).

516. Burch, G. Counseling the veteran. *Adult Educ. J.*, 1944, 3, 137-141.—A discussion is given of community plans for adjustment service centers, with a description of projects under way in a number of New York and New Jersey towns.—*S. S. Sargent* (Barnard).

517. Burlingame, C. C. You can drive a horse to water. . . . *Inst. of Living*, 1944, No. 12, 269-275.—A psychiatrist, with practical experience in industrial psychiatry, advises industry that employees work best when they feel essential to the total production effort and are able to identify themselves with the purpose of the industry. To accomplish this goal, industry should avoid paternalism and a false welfare attitude.—*S. B. Williams* (U. S. Naval Reserve).

518. Burton, A. Recruiting psychologists and psychiatrists for the public service. *Publ. Person. Rev.*, 1944, 5, 215-220.—Difficulties in obtaining personnel for a California agency led to an investigation of the employment problems of other public agencies throughout the country. Some of them were found to have difficulty in securing personnel while others were not. It was found that clinical psychologists have continued to be available for public service jurisdictions during the war, although these were chiefly women and were somewhat less experienced than was formerly true. On the other hand, there has been a real shortage of psychiatrists. Factors influencing the recruitment of personnel include general conditions of pay, working conditions, and job location, as well as requirements regarding age, residence, etc. The best four methods of finding applicants include the general mailing list, organizations of various kinds, direct contacts through organizations, and collaboration with operating departments.—*H. F. Rothe* (Stevenson, Jordan & Harrison, Inc.).

519. Chant, S. N. F. R.C.A.F. personnel counseling as a preparation for rehabilitation. *Occupations*, 1944, 23, 19-22.—The R.C.A.F. counseling program is intended to place before the individual definite facts concerning himself and his training and to relate these to facts concerning occupations. At

present, the program is limited to long-range planning and general preparation.—G. S. Speer (Central YMCA College).

520. Evans, G. R. The Army Separation Classification and Vocational Counseling Program. *Occupations*, 1944, 23, 69-74.—This is a description of (1) the procedure covering the preparation of a current record of qualifications and (2) the preliminary counseling which is given to military personnel about to leave the service. The author describes the Separation Qualification Record, sources of information, reference materials used, the assembling of test results and other data, and the training of the counselors.—G. S. Speer (Central YMCA College).

521. Foley, J. P., Jr. The use of the free association technique in the investigation of the stimulus value of trade names. *J. appl. Psychol.*, 1944, 28, 431-435.—Results gained from use of this technique in regard to various cola products are tabulated and explained. The investigation of the stimulus value of trade names is considered an important problem for several branches of applied psychology.—H. Hill (Indiana).

522. Fuller, S. E. Goodyear Aircraft employee counseling. *Person. J.*, 1944, 23, 145-153; 176-184.—Since maladjustments lead to much absenteeism and many criticisms, personnel counseling was installed at the Goodyear Aircraft Corporation. As a basis for the counseling, a form was devised covering 9 elements besides efficiency: job knowledge, perception, analysis, creative ability, judgment, initiative, responsibility, contacts, and leadership. Sometimes the form was filled out by a supervisor independently, sometimes by the supervisor in the presence of the employee, and sometimes by the supervisor in the presence of a personnel department counselor in addition to the employee. Misunderstandings were often cleared up by having both supervisor and employee fill out the forms and then discuss the differences, and many employees welcomed an opportunity to find out how they were progressing and to plan improvements so they could earn promotions. The frank discussion of employee ratings clears up many troubles caused by lack of information, makes the employee feel that he is being treated like a human being, and is a means of discovering many untapped abilities.—M. B. Mitchell (U. S. Naval Reserve).

523. G., F. How ships are built. *Person. J.*, 1944, 23, 185-198.—Men working in shipyards spend a great deal of time idle because of poor organization. Morale is low because most workers like to see things done well and dislike waste even when they are paid well to make things that are destroyed. In the assembly-line method of hiring, the employee is made to feel unimportant. The small improvements that have been made are mostly due to the efforts of a few good workers within the yard itself.—M. B. Mitchell (U. S. Naval Reserve).

524. Knowles, A. S., & Thomson, R. D. Production control. New York: Macmillan, 1943. Pp. x + 271. \$2.50.—Part V (Production Control) and Part VI (Cost Control) of the authors' *Industrial Management* (see 18: 2539) are here reproduced.—H. F. Rothe (Stevenson, Jordan & Harrison, Inc.).

525. Kuder, G. F. Intermediate manual for the Kuder Preference Record. Chicago: Science Research Associates, 1944. Pp. 16. 10¢.—This new manual is for use with the Preference Record, the purpose of which is to help young people in their choice of an occupation. Topics discussed are: purpose, administration, scoring and constructing profiles, interpretation of scores, validity, reliability, intercorrelations of the Preference Record scales, construction of the Preference Record, norms, and scoring system.—L. H. McCabe (Cambridge, Mass.).

526. Lipkin, S. The personnel consultant in an Army rehabilitation center. *Psychol. Bull.*, 1944, 41, 524-531.—The duties and activities of the personnel consultant and classification officer in an Army Service Command Rehabilitation Center are summarized. The analysis is made mainly in terms of the writer's own experience in this capacity.—S. Ross (U. S. Naval Reserve).

527. MacKenzie, D. Wage incentives. *Advanc. Management*, 1944, 9, 129-135.—Labor objects to wage incentives because of the fear of working themselves out of jobs, because of their past experience with the rate-cutting methods that follow the introduction of incentives, and because of the "unquestionable daily production quotas" that have been set up by industrial engineers as a result. The different types of wage incentives are: (a) piece rates, where the setting of standards, inspection work, and the keeping of payroll records must be accurate and fair for success; (b) bonus plans, especially the Halsey and the graduated bonus plans; (c) measured day rates, where workers doing the same type of work receive different rates of pay according to their classification; and (d) high day rates for high production, the plan adopted by Ford, whereby high production rate is maintained by good supervision and mechanical controls.—H. Moore (Stevenson & Kellogg, Toronto).

528. Mason, B. R. Color discrimination in industry. *Optom. Wkly*, 1944, 35, 933-936; 940.—Individuals who show normal color fields and no pathology may be considered suitable subjects for training in color perception; they should not be referred to as color-blind.—D. J. Shaad (Durham, N. C.).

529. Morneweck, C. D. Occupational patterns of employed minors in Pennsylvania during the past five years. *Amer. Sch. Bd J.*, 1944, 109, No. 4, 39-41.—This is a continuation of a study of youths who withdrew from school to enter full-time employment (see 18: 2971). The author examines the tremendous increase in such withdrawals for the period 1939-1943, finding the trend of employment to be away from such occupations as caddying and toward manufacturing, mechanical, and mercantile work for which the students have had little or no training. Anticipated postwar adjustment problems are briefly indicated.—G. S. Speer (Central YMCA College).

530. Norris, R. Kansas City employs the handicapped. *Occupations*, 1944, 23, 80-85.—An analysis is presented of 534 firms in Kansas City which employ handicapped workers, with a description of the types of jobs which the handicapped fill.—G. S. Speer (Central YMCA College).

531. Shartle, C. L. Occupational tools for peacetime conversion. *Publ. Person. Rev.*, 1944, 5, 207-214.—The activities of the Division of Occupational Analysis and Manning Tables in the past 10 years are briefly described. The topics covered include the *Dictionary of Occupational Titles*, the manning tables, and the development of job families and aptitude and trade tests. Particular reference is made, in the light of imminent conversion problems, to the recently published tables of jobs related to Army and Navy specialties: *Special Aids for Placing Military Personnel in Civilian Jobs* and *Special Aids for Placing Navy Personnel in Civilian Jobs*. Specimen pages from each of these manuals are included.—H. P. Rothe (Stevenson, Jordan & Harrison, Inc.).

532. Super, D. E. Clinical research in the Aviation Psychology Program of the Army Air Forces. *Psychol. Bull.*, 1944, 41, 551-556.—During the past year there has been increased emphasis on the problems of training methods, instructor selection, selection of flying personnel for key positions in combat, and redistribution of returnees. Several significant studies utilizing clinical psychological methods are described in this report. These are discussed under the following headings: case studies of pilots in training, clinical evaluation of aviation trainees, projective techniques, and adjustment after combat.—S. Ross (U. S. Naval Reserve).

533. Tuckman, J. A study of the reliability of the Minnesota Rate of Manipulation Test by the split-half and test-retest methods. *J. appl. Psychol.*, 1944, 28, 388-392.—"The internal consistency of the Minnesota Rate of Manipulation Test is high. Although the test-retest reliability coefficients are not quite as high as those obtained by the split-half method, the reliability of both *placing* and *turning* appears to be satisfactory for individual diagnosis."—H. Hill (Indiana).

534. Wallen, R. Some testing needs in military clinical psychology. *Psychol. Bull.*, 1944, 41, 539-542.—The basic factors arising in military psychological work which require the modification of existing clinical procedure are discussed. These factors include testing time, high reading level, time for scoring and interpretation, etc. The use of a cutting score and a method for the selection of critical test items are described.—S. Ross (U. S. Naval Reserve).

[See also abstracts 391, 395, 396, 407, 415, 426, 438, 466, 487, 543, 547, 550, 556, 575, 576, 581.]

EDUCATIONAL PSYCHOLOGY

(incl. Vocational Guidance)

535. Allen, M. M. Relationship between Kuhlmann-Anderson Intelligence Tests in grade 1 and academic achievement in grades 3 and 4. *Educ. psychol. Measmt.*, 1944, 4, 161-168.—"The most predictable measure obtained from the New Stanford Achievement Test, Primary Examination (Grade 3) and from the Advanced Examination (Grade 4) when predictions are made from the Kuhlmann-Anderson Intelligence Test for Grade 1, seems to be the E. Q. ($r = .67$). The MA, IQ, and P. Av. (per cent of average development) are about equally effective for prediction. "Coefficients of correlation between the

Kuhlmann-Anderson measures in Grade 1 and educational achievement in Grade 3 range from .32 to .53, and between the same test (Kuhlmann-Anderson Intelligence Test Grade 1) and educational achievement in Grade 4 from .30 to .56. These low correlations indicate that long range predictions of educational achievement based on only one group intelligence test in the first grade are highly questionable."—S. Wapner (Rochester).

536. Berg, I. A., Larsen, R. P., & Gilbert, W. M. Scholastic achievement of students entering college from the lowest quarter of their high school graduating classes. *J. Amer. Ass. colleg. Registr.*, 1944, 20, 53-59.—A study of 79 college freshmen who were in the lowest quarter of their high-school graduating class showed that they earned significantly lower grades than students in the upper three quarters of their graduating classes and that they also performed at a significantly lower level on a battery of psychological tests.—G. S. Speer (Central YMCA College).

537. Champlin, M. W. Practicum in training for adolescent leadership; a plan for relating education to the social process. Blair, Nebr.: Lutheran Publishing House, 1944. Pp. 24. \$0.60.—A method of helping students to work out a group project in independent investigation is described. Tentative outlines and guides are offered for two such projects.—G. S. Speer (Central YMCA College).

538. Cook, L. A. Changing the structure of a tenth grade class. *Sociometry*, 1944, 7, 311.—This digest of a work-in-progress report outlines an attempt to democratize the structure of a classroom group. Using sociometric tests as measures of change in the structure, the author tentatively concludes that group structure is highly stable, that cliques are especially resistant to change, and that individual guidance techniques are relatively ineffective in changing group structure.—S. B. Williams (U. S. Naval Reserve).

539. Dunlevy, E. C. Musical training and measured musical aptitude. *J. Musicol.*, 1944, 4, 1-5.—A musical training questionnaire was given 37 college and 12 musical-theory students who were also tested on the Seashore pitch, rhythm, and consonance tests. The questionnaire weights were arrived at by pooling the votes of two judges. Training and pitch correlated at $.47 \pm .08$, training and rhythm at $.35 \pm .09$, and training and consonance at $.38 \pm .08$. The highest 10 on each of the three Seashore tests were contrasted with the lowest 10. The former were found to show a greater preference for classical music.—P. R. Farnsworth (Stanford).

540. Engelhart, M. D. How teachers can improve their tests. *Educ. psychol. Measmt.*, 1944, 4, 109-124.—Methods of developing objective tests and analyzing them for validity are discussed.—S. Wapner (Rochester).

541. Field, H. H. [Dir.] The public looks at education. *Rep. nat. Opin. Res. Cent.*, 1944, No. 21. Pp. 40.—This report describes a national survey of attitudes toward educational finances, policies, and practices: 54% say the schools need more money, 58% believe teachers are paid too little, while over two thirds favor state control of education with federal aid. Major goals of education favored are

regular subjects (34%), character education (34%), and vocational training (26%). A variety of changes in our public schools is suggested by 43%. The report contains many charts, verbatim statements from respondents, and opinions of educators and legislators.—S. S. Sargent (Barnard).

542. Goodman, C. H. Prediction of college success by means of Thurstone's primary abilities tests. *Educ. psychol. Measmt.*, 1944, 4, 125-140.—The data gathered from the various studies summarized support the main conclusions that the Thurstone primary abilities correlate, in general, as well as most standardized intelligence tests with the criteria, semester point average, and grades in specific college courses, and that verbal ability correlates higher than any of the other abilities with the criteria. Multiple correlations between combinations of the primary abilities and the criteria and between combinations of single tests making up the primary abilities and the criteria are also presented.—S. Wapner (Rochester).

543. Griffin, C. H., & Borow, H. An engineering and physical science aptitude test. *J. appl. Psychol.*, 1944, 28, 376-387.—Compiled from previously developed tests to ascertain suitability of individuals for technical training, this test is used at the Pennsylvania State College to enhance the effectiveness of the Engineering, Science, and Management Defense Training program. There are six test parts: mathematics, formulation, physical science comprehension, arithmetic reasoning, verbal comprehension, and mechanical comprehension. Administration time ranges from 80 to 90 minutes. Percentile norms were established separately for 6,695 men and 2,295 women. Multiple correlations between the weighted battery of test parts and course achievement in mathematics, chemistry, physics, etc., were as high as .79. The test has proved to be more difficult for women than for men; but, with both sexes, results reveal a close agreement between test performance and training success.—H. Hill (Indiana).

544. Guiler, W. S. Spelling at the college level. *J. Amer. Ass. colleg. Registr.*, 1944, 20, 96-105.—An analysis of the spelling ability of 331 college freshmen revealed that 58% were below the standard of grade 12. The author describes the remedial program used in training a specially selected group of 52 students. Although there was a significant correlation between intelligence and time required to attain word mastery, all levels of mental ability were able to profit significantly from the remedial work.—G. S. Speer (Central YMCA College).

545. Hamilton, J. L. The factor of motivation in learning as applied to the making of a teaching film. *J. educ. Psychol.*, 1944, 35, 423-431.—Makers of teaching films are too likely to assume that any film commands attention and that this fact automatically provides adequate motivation for learning. The author points out that this is not the case and discusses seven specific techniques of motivation which he believes should be employed in films.—E. B. Mallory (Wellesley).

546. Harris, A. J., & Sternberg, W. N. An analysis of the characteristics of pupils in three remedial reading classes at the high school level. *High Points*, 1944, 26, No. 7, 43-59.—This is a detailed study of

45 boys in three remedial reading classes. Physical, mental, social, personal, and educational histories and test results are presented.—G. S. Speer (Central YMCA College).

547. Hirning, L. C. Sound trends and appropriate ambitions of the counseling movement. *Teach. Coll. Rec.*, 1944, 46, 25-33.—Psychiatry is concerned with prevention, diagnosis, and treatment of adjustment problems. It is now known that every one has a breaking point and specific vulnerabilities. Training of much-needed counselors to supplement psychiatrists should include orientation in psychiatry; use of the Rorschach method; derivation of information from counselee's associates and an understanding of family relationships; delineation of services of various specialists such as physicians, psychologists, etc.; awareness and use of community resources; translation of behavior patterns to teachers and employers; use of psychological tests; and recognition of emotional factors in vocational adjustment.—L. Birdsall (College Entrance Examination Board).

548. Jackson, J. A survey of psychological, social, and environmental differences between advanced and retarded readers. *J. genet. Psychol.*, 1944, 65, 113-131.—Approximately 300 advanced readers and an equal number of retarded readers in grades II-VI, all but 6 of whom had IQ's above 90, were interviewed, and these results were combined with standard school records. There was a disproportionate number of boys among the poor readers. Poor readers tended to read pictorial magazines. "This survey reveals the necessity for greater attention to the extraneous factors influencing reading success such as personality traits, home conditions, etc. . . . [and] seems to indicate that fears, worries, failures, introversions and the like exist to a degree which merits attention in connection with reading difficulties." The implications of this kind of survey and the information obtained are discussed with respect to the educational program.—R. B. Ammons (Iowa).

549. Kaplan, N. Salvaging illiterates in the Army. *Occupations*, 1944, 23, 74-76.—The illiterate presents many problems in addition to his educational handicap. Special training units provide the framework for developing functional literacy on a fourth-grade level, with elementary basic military training. Careful handling and skilled counseling are necessary properly to evaluate and deal with the personal problems these men present.—G. S. Speer (Central YMCA College).

550. Klugman, S. F. Test scores for clerical aptitude and interests before and after a year of schooling. *J. genet. Psychol.*, 1944, 65, 89-96.—Results were analyzed for 207 female vocational high school students taking the Minnesota Vocational Test for Clerical Workers and Strong's Vocational Interest Blank for Women at the beginning and end of a year of commercial curriculum training. There was a statistically significant gain in scores on name checking, number checking, stenographer-secretary, and general office worker tests. When the Strong numerical scores were converted to letter scores, few changes from A to C were found. As there was no significant score difference between the

30 oldest and 30 youngest students, the changes would appear to be due to training rather than maturation. High correlations were found between individual scores at the beginning and end of the year.—*R. B. Ammons* (Iowa).

551. Krause, A. L. The relationship of mental and social quotients and ages to program reading and recitation performances. *Train. Sch. Bull.*, 1944, 41, 41-47; 69-79.—This analysis of the factors determining participation of students of the Vineland Training School in reading and recitation programs examines the influence of mental and social quotients and ages. As studied over a 4-year period, it is clear that students of low IQ (below 50) rarely engage in platform reading demonstrations, although interest in recitation is not equally lacking and should be stressed in this group. Children with SQ 30-60, who constitute over half the entire group and include many in the higher IQ categories, respond readily to program reading. Recitation, on the other hand, would seem to be satisfying to those scoring low in both SQ and IQ. Substantial participation in reading activities appears in the 7-12 MA group, although an MA of 8 is suggested as the minimum necessary to insure an efficient performance. There is further evidence of increasing interest in reading as compared with recitation with an increase in SA of the student.—*R. C. Strassburger* (St. Joseph's College for Women).

552. Leo, I. Counseling in colleges with military units. *Cath. educ. Rev.*, 1944, 42, 449-455.—The author describes some of the social, religious, and morale problems faced by the military man in a college training program, briefly indicating the counseling approach to them.—*G. S. Speer* (Central YMCA College).

553. Lockhart, J. A. The value of the motion picture as an instructional device in learning a motor skill. *Summ. doct. Diss. Univ. Wis.*, 1942, 7, 249-251.

554. May, R. The present function of counseling. *Teach. Coll. Rec.*, 1944, 46, 9-16.—The increased strain on the nation's mental health requires an increased number of counselors and psychotherapists to aid in preventing more serious personality breakdowns. Counseling deals primarily with helping the client gain insight into his problems and only secondarily with the specific problem. Counseling is distinguished from psychiatry and psychotherapy. The need for more adequate college counseling and for psychological counseling in vocational guidance is stressed.—*L. Birdsall* (College Entrance Examination Board).

555. Morgan, C. L., & Bonham, D. N. Difficulty of vocabulary learning as affected by parts of speech. *J. educ. Psychol.*, 1944, 35, 369-377.—The problem of this study was to evaluate parts of speech as related to difficulty of association of word meanings. An effort was made to equate the parts of speech used as to frequency of English usage, unfamiliarity and length of foreign equivalent, ease of pronunciation and spelling, frequency of exposure sequence, and purity of grammatical form. The subjects were 148 seventh- and eighth-grade pupils. Pairs of English and Ru Ro language words were presented in an apparatus similar to Guhin's card changer. Simul-

taneous presentation of the pairs was found more effective than alternate exposure. Nouns were learned more readily than other parts of speech, and pronouns possibly more easily than the rest. Adverbs were the most difficult.—*E. B. Mallory* (Wellesley).

556. Morgan, W. J. Some remarks and results of aptitude testing in technical and industrial schools. *J. soc. Psychol.*, 1944, 20, 19-29.—The results are summarized and analyzed which were obtained from a test battery consisting of the MacQuarrie Test of Mechanical Ability, The Revised Minnesota Paper Formboard Series, and the Revised Alpha Intelligence Examination, administered to eighth-grade pupils and to students of a technical-industrial high school. "These tests are useful for selection and classification. It would be folly, however, to base decisions for vocational guidance in individual cases upon the results of only these three tests. When important decisions for educational and vocational guidance are to be made, a complete clinical study of the individual is necessary."—*F. W. Finger* (Virginia).

557. Myster, A. M. Further validation of the Wert-Myster Farming Attitude Scale. *Rural Sociol.*, 1944, 9, 226-232.—"This paper presents some evidence relative to the validity of the Wert-Myster Farming Attitude Scale for a group of young women majoring in home economics at Virginia State College. The whole scale is divided into two subscales, one measuring attitude toward farming as a vocation and the other attitude toward farming as a way of life. Reliability has been determined by the split-halves method and validity has been inferred from the fact that the scale differentiates between persons of known different farming attitude. Evidence is presented that the whole scale, the vocational items and the life items are of satisfactory validity and reliability. Finally it is shown that attitude toward farming as a vocation and attitude toward farming as a way of life are related, but it is indefensible to interpret the two as strictly identical behaviors." The reliabilities of these 5-value scales range from .800 to .891. Validities are assumed from the fact that students of domestic science score considerably lower than do agricultural students.—*P. R. Farnsworth* (Stanford).

558. Neill, A. S. The problem teacher. New York: International University Press, 1944. Pp. 160. \$2.00.—The author, writing from a background in Scottish-English education, criticizes the school system in general on the following grounds: (1) the teacher's problems of ego denial, sex starvation, inability to relax, and sense of futility in the products of his teaching and in society's use of them, with the inevitable projection of his maladjustments upon the class; (2) the emphasis of teacher training upon routinization and sterile intellectual tasks with lack of emotional education, and its reflection in the class room methods; and (3) the evils of measurement, especially with reference to fears of children. He ends with a plea to teachers to plan using the schools for training for leadership in the new and changing world and to attack openly the maladaptations in our society which the schools reflect.—*L. Adams* (Barnard).

559. Odell, C. W. The scoring of continuity or rearrangement tests. *J. educ. Psychol.*, 1944, 35, 352-356.—Spearman's rho or his *R* correlation technique gives the best methods for scoring a test in which the subject is asked to rearrange items in a correct order, such as chronological order or order of importance. A deterrent to the use of these methods is the labor ordinarily involved and the problem of converting a coefficient into a suitable score for each subitem, convenient for totalling complete test results. The author presents a table, devised for use with subtests containing 4 to 10 elements, which facilitates the finding of numerical scores after the calculation of only the sum of the gains or the sum of their rank differences squared.—*E. B. Mallory* (Wellesley).

560. Park, J. An analysis of the verbal accompaniment to classroom sound films. *Sch. Rev.*, 1944, 52, 420-426.—Eight sound films designed for classroom use are analyzed from the aspect of difficulty of vocabulary and sentence length. The great majority of words employed (average percentage, 84.8) are below the 6000-word-level of the Thorndike list, presenting a vocabulary burden which is reasonably low when compared with that of comic books. Difficulty estimated in terms of average sentence length exceeds that of selected school reading materials and compositions written by students in grades IV-VIII. When compared with a social-studies textbook and with standards for adults of limited reading ability, the average length of the film sentences is not excessive.—*R. C. Strassburger* (St. Joseph's College for Women).

561. Sandin, A. A. Social and emotional adjustments of regularly promoted and non-promoted pupils. *Child Developm. Monogr.*, 1944, No. 32. Pp. ix + 142.—Interviews, direct observation, sociometric techniques, ratings by teachers, a "Who Is It?" test, and other approaches were applied to 139 pupils who had failed of promotion at least once in grades I to VIII as compared with 277 fellow pupils. The slow-progress children were invariably older, generally taller, and in many cases more mature physically; they had a lower average IQ (88.5 compared with 110.8) but with a range up to 119. Repeaters selected companions from above their own grade level more than did non-repeaters; they were not generally regarded by others as appropriate companions or seatmates. Teachers rated them lower than non-repeaters in 17 of 20 traits. 40% of the repeaters as against 13% of others wished to quit school as soon as possible. 82.6% as against 55.6% reported worries about the possibility of non-promotion, and many reported other emotional reactions to non-promotion, such as feeling badly or discouraged or unfairly treated. Regular pupils showed sympathy more than ridicule, but about 40% of the pupils reported that they had heard classmates deride pupils who had failed to pass. In the light of present findings and earlier negative findings on the effect of non-promotion on academic progress, it is submitted that "the burden of proof rests upon those who advocate non-promotion as a policy affecting a considerable proportion of elementary school pupils."—*A. T. Jersild* (Columbia).

562. Shoobs, N. E. Psychodrama in the schools. *Psychodrama Monogr.*, 1944, No. 10. Pp. 19.—See 18: 3894.

563. Stephens, J. M., & Baer, J. A. Factors influencing the efficacy of punishment and reward: the opportunity for immediate review, and special instructions regarding the expected role of punishment. *J. genet. Psychol.*, 1944, 65, 53-66.—Sixty 3-alternative multiple choice questions were presented on lantern slides to 4 groups ($N = 29$ to 37) of high school boys on 3 successive days. Questions represented all levels of answer confidence, with equal numbers of right and wrong most probable answers at each level. The first day all subjects indicated their preferred answer and their confidence in it. The subjects answered similarly on the second day; they were then informed by an invisible ink device either whether their answers were right or wrong or whether no information was to be given; and 0, 4, 8, or 12 seconds were allowed by groups of questions for the subjects to review their answers. Two groups were told that avoiding incorrect answers was as important as remembering the correct. On the third day no information was provided, and no delay periods were introduced. "When opportunity for review was extended equally for all conditions, it was found to enhance only the influence of punishment on strong associations and the influence of reward on weak associations. . . . Subjects become more likely to profit from symbolic punishment when they are told that it is just as important to avoid an incorrect response as to retain a correct response."—*R. B. Ammons* (Iowa).

564. Thorndike, E. L. The influence of differences in the amount of practice in causing differences in achievement. *J. gen. Psychol.*, 1944, 31, 101-109.—The mean performance of 8 groups of college students in adding integers ranged from 108 to 35 per 100 sec. on the first day and from 140 to 50 on the seventh. Forward and backward extrapolations suggest that there is little progress toward equalization of ability in this function with identical amounts of practice time. Superiority in the ability maintains and increases itself not only by causing more repetitions of the connection in school drills with a time limit, but also by causing a greater increase in the strength and facility of the connections per repetition.—*G. W. Hartmann* (State College, Pa.).

565. Thorndike, E. L., & Lorge, I. The teacher's word book of 30,000 words. New York: Bureau of Publications, Teachers College, 1944. Pp. xii + 274. \$2.85.—This is an extension of the 1921 and 1931 Thorndike word books, including the data from these counts and from three other counts of over 4½ million words each. Most of the book comprises Part I, being the list of English words occurring at least once per million words of representative general reading matter. The five columns after each alphabetized entry report (1) numbers stating occurrences per million words, (2) the Thorndike general count of 1931, (3) the Lorge magazine count, (4) the Thorndike count of 120 juvenile books, and (5) the Lorge-Thorndike semantic count. Part II is a list of words occurring at least once per four million words of printed usage but not so often as once per million words. A list of the 500 most fre-

quently encountered words and of the 500 next in order completes the volume. The introduction contains a detailed set of instructions for the use of this material by elementary and secondary school teachers in furthering pupil growth in vocabulary.—*G. W. Hartmann* (State College, Pa.).

566. Tinker, M. A. Criteria for determining the readability of type faces. *J. educ. Psychol.*, 1944, 35, 385-396.—Visibility under conditions of reduced illumination, perceptibility at a distance, and speed of reading have all been proposed as criteria of readability. With Scotch Roman as the standard, relative scores for 9 other type faces were found, by tests determining these three characteristics. The subjects were 36 university subjects. Since speed of reading is the most direct measure of readability and since the rank positions of type faces on this basis did not agree with the rank positions for either visibility or perceptibility, the author concludes that, under most conditions, visibility and perceptibility are not valid measures of readability.—*E. B. Mallory* (Wellesley).

567. Traxler, A. E. Problems of measurement of reading ability. *Sch. Rev.*, 1944, 52, 493-495.—Because of the intricate nature of the reading process, accurate measurement entails great difficulty. Seven basic problems in the measurement of reading are identified and discussed.—*R. C. Strassburger* (St. Joseph's College for Women).

568. Tuckman, J. High school student norms—revised Kuder Preference Record. *Occupations*, 1944, 23, 26-32.—Tables present norms for each sex in the college-preparatory group and the group not planning to go to college. Data are based on the scores made by 533 boys and 739 girls in grades 9 to 12.—*G. S. Speer* (Central YMCA College).

569. Vincent, D. Personality and mental hygiene. *Cath. Schs J.*, 1944, 44, 245-246.—Properly to assume its responsibility, the school system must have psychological clinics with at least consulting psychiatrists. In addition, however, every teacher must be trained and psychologically oriented.—*G. S. Speer* (Central YMCA College).

570. Weber, C. D. Old and new College Board scores and grades of college freshmen. *J. Amer. Ass. colleg. Registr.*, 1944, 20, 70-72.—The author presents the predictive value of 6 examinations: the June College Board examinations for 4 prewar years; the April Achievement Test for 2 war years; the Regents' Examinations for 4 prewar years; and the A.C.E. Psychological Examination and the Scholastic Aptitude Test for the entire period of 6 years. The Regents' Examinations gave the best prediction of freshman grades.—*G. S. Speer* (Central YMCA College).

571. Wittenborn, J. R., & Larsen, R. P. An empirical evaluation of study habits in elementary German. *J. appl. Psychol.*, 1944, 28, 420-430.—"In the present study an attempt has been made to evaluate forty-two items in a study habit questionnaire for students in the first semester of college German. The study habit items included in the questionnaire were those describing particular procedures, attitudes, or difficulties. In compiling the list, an effort was made to include study character-

istics which were remediable." Evaluation of the questionnaire was accomplished by correlating each item with the results of a German test, after correcting for differing psychological examination scores. Items involving routine or time were found to bear little relation to academic achievement, while feelings of anxiety toward the course were important. Ten items descriptive of study procedures are listed as significant.—*H. Hill* (Indiana).

572. Witty, P. A., & Goldberg, S. Evolution in education through Army experience. *J. educ. Psychol.*, 1944, 35, 338-346.—The authors review certain aspects of the pre-induction training and the Army specialized training programs, outlining the special characteristics of Army training. Despite apparent differences between Army training and civilian education, there are many lessons to be learned from Army experiences. The authors list 14 educational principles and techniques, the value of which has been strikingly demonstrated by the success of the Army program.—*E. B. Mallory* (Wellesley).

573. Zander, A., & Lippitt, R. Reality-practice as educational method. *Psychodrama Monogr.*, 1944, No. 9, 5-27.—See 18: 3901.

[See also abstracts 309, 333, 339, 348, 353, 457, 467, 494, 515, 584, 586.]

MENTAL TESTS

574. Hamlin, R. M. An analysis of age-progress curves as related to the mental growth curve: a study of vocabulary. *Arch. Psychol.*, N. Y., 1944, No. 293. Pp. 37.—The chief interest of this study is in the question of whether different intelligence test materials give different age-progress curves. Only vocabulary materials were used, and these varied chiefly on the basis of either the difficulty of the concept involved or the frequency of contact with the words. The subjects were 326 boys and 330 girls, native-born whites, between 7 and 15 years in CA, from a small Long Island town. Group tests had indicated a roughly normal distribution of IQ's in this school. Each S was given 200 multiple choice items, and age-progress curves were established for nine different selections of these items by Thurstone's absolute-scaling method. The nature of these selections can be indicated, in part, in a summary of results: (1) The total-vocabulary curve here found is a straight line (with a suggestion of negative acceleration). (2) The curves for less familiar and for abstract words show slight positive acceleration. (3) A single curve is roughly characteristic of a wide variety of vocabulary materials. (4) Words differing in concept level and frequency level give essentially identical age-progress curves. (5) The vocabulary curve of the present study resembles the group test curve of several investigators. A discussion of the high point of age-progress curves and choice of units for such curves is included. Bibliography of 50 titles.—*C. E. Buxton* (Iowa).

575. Humphrey, G. Report of the Test Research Committee. *Bull. Canad. psychol. Ass.*, 1944, 4, 34-37.—The Test Research Committee of the Canadian Psychological Association has constructed 3 alternate forms of the "M" test (a general selection test

now used by the Canadian army but designed on the initiative of the Association and originally subsidized by the committee members): a verbal test for officer candidates, a pattern perception test, and a screening test for navy recruits. The results of these, as well as the work on undisclosed military problems, are considered very satisfactory.—*F. W. Finger* (Virginia).

576. Lewinski, R. J. Discriminative value of the sub-tests of the Bellevue Verbal Scale in the examination of naval recruits. *J. gen. Psychol.*, 1944, 31, 95-99.—Data from 451 naval recruits under clinical observation, median IQ 70, show that 5 subtests (Information, Comprehension, Arithmetical Reasoning, Digit Memory Span, and Similarities) each discriminate effectively normal, dull normal, borderline, and mentally deficient groups.—*G. W. Hartmann* (State College, Pa.).

577. Maslow, A. H. What intelligence tests mean. *J. gen. Psychol.*, 1944, 31, 85-93.—Intelligence testing merely samples the individual's efficiency of behaving by comparing his performance with an original standardizing group. The raising-lowering of the IQ is not a matter of increase-decrease in "intelligence," but a measure of the relative rate at which it is acquired. The tested IQ is approximately constant, but we do not know why this is so.—*G. W. Hartmann* (State College, Pa.).

578. Pintner, R., Dragositz, A., & Kushner, R. Supplementary guide for the revised Stanford-Binet scale. (Form L). *Appl. Psychol. Monogr.*, 1944, No. 3. Pp. 135.—A collection of responses is presented with which the responses obtained by the student or psychometrist may be compared. Responses completely duplicating those already given in the original Terman-Merrill text have been omitted.—*T. E. Newland* (U. S. Naval Reserve).

579. Rabin, A. I. Test constancy and variation in the mentally ill. *J. gen. Psychol.*, 1944, 31, 231-239.—The inconstancy of the IQ is commonly assumed to be greater with the mentally ill than with normals. However, a Wechsler-Bellevue retest r of .84 was obtained with 60 patients, verbal subtests being more stable than the performance group after a mean interval of 13½ months.—*G. W. Hartmann* (State College, Pa.).

580. Schafer, R., & Rapaport, D. The scatter: in diagnostic intelligence testing. *Character & Pers.*, 1944, 12, 275-284.—Scatter is the distribution of passes and failures on the subtest items of a test. Clinical psychologists need a test which is adequate in this respect. The Stanford-Binet Scale is inadequate, while the Wechsler-Bellevue Scale is quite satisfactory. Recent investigations on scatter are reviewed.—*M. O. Wilson* (Oklahoma).

581. Staff, Personnel Research Section, Classification and Replacement Branch, AGO. The new Army individual test of general mental ability. *Psychol. Bull.*, 1944, 41, 532-538.—This new test has been prepared by the Personnel Research Section in response to numerous requests from the field. Specifications were set and are described in the report. The work on the selection of tests, validity, reliability, and standardization of the final battery is described.—*S. Ross* (U. S. Naval Reserve).

582. Tomlinson, H. Differences between preschool Negro children and their older siblings on the Stanford-Binet scales. *J. Negro Educ.*, 1944, 13, 474-479.—Seventy-five pairs of Negro siblings in the age range of 4 to 9 years were given both forms (L and M) of the 1937 Stanford-Binet examination. Age differences between siblings ranged from 9 months to 5 years 2 months. The mean IQ for composite L and M IQ's was 10.4 points below the general norm for white children, with variability also considerably reduced. The significantly higher IQ for the younger Negro children indicated that IQ decreases with age. The inter-sibling correlation of IQ's was .26 and is of the same order as found for similar homogenous groups. Correlation of the Sims index of socioeconomic status and IQ suggested an increasing relationship between environmental factors and test performance with increase in age.—*A. Burton* (Calif. State Personnel Bd.).

[See also abstracts 404, 475, 535.]

CHILDHOOD AND ADOLESCENCE

583. Brown, F. An experimental and critical study of the intelligence of Negro and white kindergarten children. *J. genet. Psychol.*, 1944, 65, 161-175.—Second-generation native white kindergarten children (341) were compared for Stanford-Binet, Form L, intelligence with 91 Negro kindergarten children of the same CA. Mean white IQ was 107.1, and mean Negro IQ was 100.8 with practically identical variances. All children were divided into 6 groups on the basis of parents' occupations. Groups ranged in mean IQ, from high to low: white females, white males, Negro males, Negro females. Variances for white and Negro IQ's were homogeneous at all occupational levels. The total Negro group resembled the white semiskilled and unskilled occupational groups. The findings are related to a theory of developmental constriction based on cultural factors.—*R. B. Ammons* (Iowa).

584. Bruno de Varela, E. E. La personalidad y el carácter: los tipos psicológicos; las tendencias; consecuencias pedagógicas. (Personality and character: psychological types and tendencies; pedagogical consequences.) *Rev. Educ. La Plata*, 1944, No. 2, 55-59.—As a unique individual, each child expresses his type, which is his spiritual essence and the antithesis of temperament. Temperament has a biological reference. Several types, as formulated by Calzetti and Korn, are schematized in tabular form. Six pedagogical principles (of child management) for the formation of character are given, and appropriate teacher attitudes and techniques are briefly stated.—*H. D. Spoerl* (Jeffersonville, Vt.).

585. Child, I. L., & Adelsheim, E. The motivational value of barriers for young children. *J. genet. Psychol.*, 1944, 65, 97-111.—One hundred twenty children, mostly of preschool age, were used in a series of 7 experiments duplicating parts of work reported by Wright (see 12: 802) on children's verbally and gross-behaviorally expressed preferences for more and less available objects of comparable desirability. "At the very least our results justify the conclusion that there is no uniform tendency to choose a barred object, and the results,

taken in conjunction with Wright's, give strong initial evidence for the greater generality of an opposite tendency to choose the more available of two objects." Possible cultural bases for a learned preference of less over more accessible desirable objects are discussed.—*R. B. Ammons* (Iowa).

586. Dailey, J. T. The subnormal child; education for social living. *Tex. St. J. Med.*, 1943, 39, 352-353.—The common assumption by educators (largely due to controversy as to stability of the IQ) that the subnormal child's problem is solely one of intelligence leads to a defeatist attitude. The aim of his training is to enable him to adjust adequately in his home under supervision, with minimal disturbance of normal home activities. The emphasis of the special school is on social adjustment and group activities, thus enabling the child to make normal contacts and develop self-esteem, self-control, and social graces.—*M. E. Morse* (Baltimore, Md.).

587. Dickel, H. A. The teacher and child guidance in Oregon. *Understanding the Child*, 1944, 8, 19-21.—The development of the child guidance program in Oregon is reviewed with special reference to the teacher's relationships to the clinic. "Most of the information in regard to the child's physical, emotional, and intellectual adjustment in the school situation and on the playground is obtained from the teacher, and it has been found that many valuable contributions about the youngster's environment, at home or away from school, can also be given by the teacher."—*S. B. Sarason* (Southbury Training School, Conn.).

588. Dickinson, A. E., & Tyler, F. T. An experimental study of the generalizing ability of grade II pupils. *J. educ. Psychol.*, 1944, 35, 432-441.—Four groups, each composed of 40 grade II children, were matched for sex and IQ, and each group was given a learning series and a test in concept formation by one of the following methods. In method I, positive instances of a visual complex connected with a nonsense syllable were presented serially. In method II, serial presentation was also employed, but only positive items were used. In method III, positive instances were presented, one at a time, but allowed to remain in sight. In method IV, procedure similar to method III was used with both positive and negative items. There was some evidence that boys profited more than girls from the presence of negative instances. Scores were higher for serial than for cumulative presentation, suggesting that the effort to remember the material facilitated concept formation. Correlations between scores and MA were .02 to .22 and between scores and reading age, .04 to .39. Odd-even item reliability, stepped up by the Spearman-Brown formula, was .87 to .92.—*E. B. Mallory* (Wellesley).

589. Jastak, J. The social acceptability test. *Understanding the Child*, 1944, 8, 11-18.—The test "consists of 20 questions which direct the children to choose companions and playmates for social functions or to select classmates to represent the whole

group in a more or less official capacity. . . . The form and the contents of the questions may be changed to suit the occasion or the age level of the children as the actual choices are more important than the type of activity mentioned in the questions." The manner of administering and tabulating results is given, and some of the more important conclusions which can be drawn from results are presented.—*S. B. Sarason* (Southbury Training School, Conn.).

590. Kanner, L. Convenience and convention in rearing children. *Sci. Mon.*, N. Y., 1944, 59, 301-306.—Genuine parental affection, which stems from a combination of fortunate experiences and emotional attitudes, is as much an essential prerequisite of wholesome development as is the need for food and shelter. "The rights of children include the satisfaction of the fundamental human needs for affection, acceptance, and security. . . . Parent education will have to emphasize these needs."—*E. Girden* (Brooklyn).

591. Koch, H. L. A study of some factors conditioning the social distance between the sexes. *J. soc. Psychol.*, 1944, 20, 79-107.—By the method of paired comparisons, children (both Negro and white) from nursery school to high school indicated their preferences in association among their classmates. In general, the individuals stated preference for members of their own sex; the distance between sexes first increased and then decreased with grade and age. The data are analyzed in detail with respect to age, grade, sex, and race.—*F. W. Finger* (Virginia).

592. Paneth, M. *Branch Street*. London: Allen & Unwin, Ltd., 1944. Pp. 128. 6s.—This book describes the attempt made by Mrs. Paneth, an Austrian refugee, to run a club for children in a London slum area. The children were extremely poverty stricken, their parents belonging to the waster and semicriminal class; their behavior was antagonistic, aggressive, destructive, and lewd. Mrs. Paneth attributes this to the fact that, once past babyhood, they received no care and little affection; they had to fight and cheat for everything they needed. They were very kind to their younger brothers and sisters, but the care of these imposed an added strain. Mrs. Paneth realized that an attempt to impose normal control and discipline led merely to further antagonism. Thus when they first came to the center, they were allowed to scream, fight, and destroy at will. After a time it appeared that her calmness and friendliness did begin to produce some effect; the children began to tire of their lewdness and destructiveness, and some, the girls especially, became interested in painting, sewing, etc., and the boys in boxing. Unfortunately the experiment could not be continued, so that it was impossible to say if the children would at length have accepted the normal disciplinary measures which Mrs. Paneth intended in time to apply.—*M. D. Vernon* (Cambridge).

[See also abstracts 476, 529, 548, 561.]

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